Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
)	
Annual Assessment of the Status of)	MB Docket No. 04-227
Competition in the Market for the)	
Delivery of Video Programming)	

REPLY COMMENTS OF THE NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

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August 25, 2004

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The National Cable & Telecommunications Association ("NCTA"), by its attorneys, submits the following Reply Comments in response to the comments submitted in this proceeding.

INTRODUCTION AND SUMMARY

The goals of competition and choice in the delivery of video programming envisioned by the Commission a decade ago in the first annual video competition report, and further elaborated in the second annual report, have been achieved. At that time the Commission pictured a competitive marketplace characterized by "vigorous rivalry" between multiple MVPDs (multichannel video programming distributors) offering closely substitutable services." Its tenth annual report, released earlier this year, recognized that today "consumers have [in addition to cable] the additional choice of at least two national DBS providers" and that "the vast majority

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Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, 11 FCC Rcd 2060, 2063 (1995) ("Second Annual Report"); see also Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, 9 FCC Rcd 7442, 7447 (1994) ("First Annual Report") ("the 1992 Act's regulatory scheme serves as a transitional mechanism until competition develops and consumers have adequate multichannel choices.") (emphasis supplied).

of Americans enjoy more choice, more programming, and more services than any time in history."²

That choice, improved quality, more and better programming, technological innovation and greater customer control and options have come as a direct result of competition. And again this year, NCTA showed that, by all measures, competition in the delivery of video programming is not only firmly in place but more intense than ever. The data show that cable's MVPD share continues to decline (from 91 percent in 1994 to 73 percent today). Indeed, the latest headlines proclaim that direct broadcast satellite (DBS), which has grown to more than 23 percent of the MVPD market, is gaining customers at a rapid pace. Moreover, as NCTA showed, the multichannel video marketplace is sufficiently robust to attract a new national DBS entrant, VOOM. Indeed, the development of new potential MVPD competitors, such as broadcast-spectrum services, telco-delivered fiber-to-the-home, and other broadband services underscores the dynamism of the video marketplace.

In addition to the growth in subscribers to cable's main video rivals, DIRECTV and EchoStar, a host of other indicia establishes the competitiveness of today's video marketplace. Cable companies, DBS operators and the telephone companies battle through various bundling strategies that combine video, broadband Internet access, and increasingly, telephone services, to attract customers. Advertising in this area of U.S. commerce is intense and nearly unavoidable. At the same time, competitors charge ahead with capital investments to enhance infrastructure capabilities and add services as quickly as possible to keep pace with changing marketplace

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² Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, 19 FCC Rcd 1606 ¶ 2 (2004).

conditions, from HDTV to digital video recorders to Internet-delivered products.³ Interactive television, movies on demand, DVDs by mail, and broadband Internet video content, among others, compete for the viewer's attention and dollars.

NCTA and other cable parties in this proceeding lay out facts and data demonstrating the competitive activity and constant change in the multichannel video marketplace. Nothing in the record disputes this conclusion. Even cable's competitor, DIRECTV – which serves over 13 million customers, as the 2nd largest MVPD in the country – recognizes that its offering of DBS provides consumers with a multichannel video alternative that has near universal reach, and that the availability of DBS alternatives has resulted directly in lower prices for multichannel video services.

Nonetheless, as in past years, some parties use this proceeding as an annual open-mike session to raise regulatory concerns based on a competitive landscape that no longer exists. For example, the Broadband Service Providers Association and RCN Corporation claim that only wireline competition is real competition. This fiction gives them a basis to urge that all programming available on cable systems be available to all MVPDs on the same terms and conditions. Other parties call for à la carte regulation or digital must carry rules. The National Association of Telecommunications Officers and Advisors (NATOA) renews various unsubstantiated claims about instances of anticompetitive behavior by cable companies.

No one can dispute the record on the central issue in this proceeding: providers of video programming in the U.S. operate in a highly competitive and highly dynamic marketplace.

Cable must compete hard to maintain current customers or win new ones. Satellite companies are aggressively marketing their product and gaining more and more new customers. The giant

Just last week, SBC-EchoStar announced an online movie service aimed at customers of cable video-on-demand.

Bell companies have entered the market with dish-phone-data combinations that are winning customers too. None of the parties in this proceeding has presented any compelling evidence or reason to think that further Commission action is necessary to facilitate competition in the video marketplace.

The time has come – indeed, the time is past – for the Commission to state unequivocally that the marketplace for the delivery of video programming is characterized by a vigorous rivalry among multiple competitors offering closely substitutable services. Based on the record in this proceeding, no other conclusion is possible.

I. THE RECORD CONFIRMS THE "VIGOROUS RIVALRY" AMONG CABLE COMPANIES, DIRECTV AND ECHOSTAR, WIRELINE OVERBUILDERS, AND OTHER PROVIDERS OF VIDEO SERVICES

In its comments, NCTA urged the Commission to evaluate the state of competition among distributors of video programming based upon the agency's vision articulated in early video competition reports: "vigorous rivalry among multiple MVPDs offering closely substitutable services." NCTA demonstrated that this vision has now been realized. The vast majority of residential consumers have at least three multichannel video alternatives – cable, DIRECTV, EchoStar – and an array of service packages from which to choose.

The continually escalating competition between cable companies and direct broadcast satellite companies is evidenced by the steady decline in the MVPD share of cable companies, coupled with the steady rise in the share achieved by DIRECTV and EchoStar. At the national level, cable's MVPD share has dropped from 91 percent in 1994 to 73 percent in the most recent quarter.⁴ State-by-state, the direct-to-home (DTH) share of MVPD households relative to the

[&]quot;SBC, EchoStar Plot Online Movie Service," The Wall Street Journal, Aug. 19, 2004, B1.

⁴ NCTA estimates based on data from Kagan Research LLC, *Kagan Media Money*, May 26, 2004, p.6; and data from Nielsen Media Research.

cable share is at least 20 percent in 40 states.⁵ Reports since initial Comments were filed show the continuation of the national trend, with combined DIRECTV and EchoStar subscribership increasing by 749,000 subscribers, and the combined number of subscribers of the top five cable MSOs decreasing by 222,000.⁶

The intense competition between cable companies and their DBS competitors is further illustrated by the aggressive advertising and marketing campaigns mounted by the two industries. Cable companies are marketing packages of traditional and advanced video offerings, high speed Internet access, and telephone services. Satellite companies are teaming up with regional telephone companies to package their products to stay competitive with cable. And, as NCTA and Comcast pointed out, cable and satellite competitors are investing in infrastructure upgrades and other innovations and offering a variety of new services, targeting consumers' desire for on-demand, customized programming, HDTV, interactive features, and other products. Finally, competition for viewers in the video marketplace does not end with multichannel video providers. It also comes, as NCTA and others demonstrated, in the form of DVDs sold and rented at retail and broadband Internet content.

As Comcast summed it up:

[C]able faces stronger Direct Broadcast Satellite ("DBS") providers, one of which is now controlled by global media powerhouse News Corp. and two of which now

⁵ SkyTRENDS SkyMAP, April 2004; <u>www.skyreport.com</u>; TV Household data from Nielsen Media Research.

Company financial data from quarterly 10Q filings. See also "Cable Trouble: Subscriber Growth Stalls as Satellite TV Soars," The Wall Street Journal, August 4, 2004. SBC reports 120,000 subscribers to Dish Network since its March 2004 SBC-Dish offer was launched. The Wall Street Journal, Aug. 19, 2004, at B1.

⁷ See e.g., "Cable, phone giants slug it out," The Business Journal, Aug. 13, 2004; "Murdoch's Channeled His DIRECTV Efforts Into Taking Subscribers From Cable Firms," Investor's Business Daily, Aug. 6, 2004; "BellSouth Campaign aimed at cable foes," The Atlanta Constitution, Aug. 3, 2004.

NCTA Comments at 29-47; Comcast Comments at 22-38. Verizon is moving ahead with the rollout of fiber directly to the home that will deliver a range of advanced broadband services, including video programming, HDTV, high-speed Internet, interactive games and other services. "Bringing Fiber Home," "Video Services are Big Lure," The Wall Street Journal, Aug. 19, 2004, B1.

have aligned with the Bell companies in joint marketing campaigns. A third, catering to HDTV aficionados, is now competing coast-to-coast. Consumers are also increasingly taking advantage of other methods of accessing video programming: retail DVD sales and rentals are booming, Internet-based DVD rentals have nearly doubled, various Internet-based video streaming businesses are growing rapidly, and multichannel pay services using broadcasters' multicast capabilities have now been launched.⁹

While other parties to this proceeding would like the Commission to adopt regulations that accord them a competitive advantage, they do not dispute the inexorable gains in MVPD share by cable's competitors or the massive infrastructure investments and new service offerings undertaken by cable companies in response to competition. They present no evidence that conflicts with data submitted by NCTA reflecting the competitive state of play in the marketplace for the delivery of video programming. Nor do they contend that DIRECTV and EchoStar fail to offer consumers two facilities-based alternatives to their local cable operators.

DIRECTV, cable's leading national competitor, argues correctly that this competition has led to lower prices. It cited the GAO Report of October 2003 in support of this proposition:

Even the GAO study acknowledges DBS competition has caused cable operators to lower rates, although not as much as policy-makers would like. More importantly, GAO failed to ask what in DIRECTV's view is the crucial question – whether cable rates overall are lower because of DBS competition *than they otherwise would be.* DIRECTV is quite sure that the answer is yes, if only because cable operators routinely price their offers to new customers to match special offers made by DIRECTV and EchoStar. This, indeed, is reflected in GAO's own surveys.¹⁰

The Broadband Service Providers Association ("BSPA") and RCN, however, contend that DBS competition is no substitute for wire-based competition that they provide in the areas in which they operate. Relying upon anecdotal information, they maintain that it is wire-based

⁹ Comcast Comments at 2.

competition that will result in lower cable prices and urge the Commission to engage in regulatory actions that will enhance the competitive status of overbuilders.¹¹

While the GAO Report found a link between hard wire overbuilders and lower prices, its methodology was fundamentally flawed. Moreover, as NCTA has systematically demonstrated in a study and testimony previously submitted to Congress regarding the GAO's findings, overbuilders' prices are, in virtually all cases, the result of anomalous circumstances and are artificially low.

GAO did not do a statistically significant survey, but instead looked at 6 systems – about 1.5% of all overbuilds – and compared prices in those communities with six "similar" communities in which there was no overbuild competition. NCTA, however, examined *all* of the *433* communities with identifiable overbuild systems. We confirmed that most of them did, in fact, display anomalous characteristics that explain why their prices (and the prices of competing cable operators in those communities) may, at least temporarily, be lower than prices in other communities.

Steven S. Wildman, Professor of Telecommunication Studies at Michigan State

University, analyzed the results of the NCTA survey of all overbuilds. In a white paper
submitted to Congress and attached to these reply comments, he found that lower rates in some
of those situations truly tell us little about whether pricing is competitive in non-overbuilt
markets. To the contrary, as Professor Wildman concludes, "[a] close look at overbuilders and

Comments of DIRECTV Group, Inc., Jul. 23, 2004, at 7-8 ("DIRECTV Comments") (emphasis in original), citing GAO Report to the Chairman of the Senate Committee on Commerce, Science and Transportation entitled "Issues Related to Competition and Subscriber Rates in the Cable Television Industry," October 2003.

¹¹ See Comments of BSPA, Jul. 23, 2004; RCN Comments, Jul. 23, 2004.

the communities they serve shows that it would be imprudent to use prices in these communities as benchmarks for evaluating prices in other cable communities."¹²

What are the anomalous circumstances in these markets that explain why this is the case? First, overbuild prices are often unsustainable. As GAO pointed out, overbuilders underestimated the extent to which the marketplace they chose to enter was already fiercely competitive. Overbuilders may have assumed that they could easily and profitably capture customers from incumbent cable providers with lower prices. But sustainable competition from DBS, which enjoys nationwide economies of scale, is already providing competitive pressure on incumbent cable operators.

So overbuilders were caught in an economic bind. To entice customers away from the incumbent cable operator, which already competes with DBS providers, the overbuilders might have to charge lower prices than the incumbent. But those lower prices were insufficient to cover their costs and investment risk and turned out to be economically unsustainable for more than an introductory period. As a result, many overbuilders either have failed or are failing — often because they have failed to persuade the investment community that overbuilds are based on an economically sound and sustainable business model. Or they have, before long, had to raise their prices to levels comparable to incumbent operators.

Prices of companies that have failed or are failing obviously cannot be viewed as benchmarks for what competitive systems should charge. Moreover, as Professor Wildman points out,

It is not uncommon for firms entering a market to offer their products or services at prices too low to cover their costs over the long term. They do this to rapidly build their customer base to a level large enough to ensure profitability once

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Steve Wildman, "Assessing the Policy Implications of Overbuild Competition," February 9, 2004, at 27 (Attachment A).

prices return to sustainable levels. Incumbents often respond to such tactics with lower prices of their own. Because market prices frequently rebound to higher levels once entrants' initial price-cutting strategies have run their course, it is important that prices in markets with recent entry not be used as competitive benchmarks for prices in other markets.¹³

Some overbuilders have been able to sustain rates lower than most incumbent cable systems. But this is only because they purchased their systems *from* failing companies at pennies on the dollar. This explains the circumstances in almost 20% of all overbuild communities. When companies purchase systems for much less than what it cost to build them, they can sustain prices that reflect this discount. But there is no reason to view such prices as in any way indicative of what an economically efficient incumbent or new cable operator facing marketplace competition would or should charge. They are, in effect, subsidized by the initial overbuilder who mistakenly invested in a system that should never have been built in the first place, given the real costs of construction and operation.

Wildman identified other reasons why overbuilders' prices may be artificially lower than most incumbent cable operators. For example, in some overbuild communities, overbuilders do not have the same costly and burdensome franchise requirements as the competing incumbents. In particular, many do not have the same build-out requirements as incumbents, and they cherrypick high-density areas that are less costly to serve on a per-household basis.

Also, many overbuilders are municipally owned or are owned by cooperatives and operate on a *not-for-profit* basis. Others are owned by utilities or are affiliated with a local telecommunications company, giving them unique cost and marketing advantages and, in some cases, the benefit of cross-subsidization by the ratepayers of the regulated utility service.

¹³ *Id.* at 11.

Overbuilds are rare in any event – only 433 of the 33,485 cable communities nationwide have two competing franchised wireline providers. And the bottom line in nearly all these cases – an overwhelming 428 of the 433 identifiable overbuild communities – is the result of anomalous circumstances like those described above, which explain their artificially low prices. In the rare circumstances where overbuilders exist, incumbent cable operators cannot afford to ignore such wireline competition. But they already face vigorous competition from two DBS providers in virtually every community that they serve. The services they offer and the prices they charge are already dictated and driven by such competition – whether or not they face an additional wireline competitor.

Thus, overbuilders may enter the market with prices that are lower than these already competitive prices. And incumbent cable operators may have no choice but to reduce their prices to such levels in response, at least where those services are not subject to regulation. Whether or not overbuilders ever figure out a sustainable business model, their current model cannot serve as a benchmark for assessing the prices and conduct of cable operators in today's highly competitive video marketplace.

II. NATOA'S ALLEGATIONS OF ANTICOMPETITIVE CABLE PRACTICES LACK CREDIBILITY

The National Association of Telecommunications Officers and Advisors, and the Alliance for Community Media (collectively "NATOA"), contend cable companies "have engaged, and are engaging, in a variety of anticompetitive practices to thwart competition from both public and private overbuilders." These allegations are based upon testimony submitted in February 2004 by Coralie Wilson, President of NATOA, to the Subcommittee on Antitrust,

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¹⁴ Comments of the National Association of Telecommunications Officers and Advisors and the Alliance for Community Media, Jul. 23, 2004, at 6 ("NATOA").

Competition and Business and Consumer Rights of the Senate Judiciary Committee. This testimony contained a report that allegedly "included dozens of examples of predatory pricing, rate discrimination, denial of access to programming, exclusion of competitors from multiple dwelling units, threats not to do business with contractors and suppliers that wanted to serve new competitors, and an assortment of other unfair business practices." NATOA incorporates "its testimony and report" in this proceeding.

However, as NATOA *concedes*, when it submitted its report to Congress, it "did not vouch for the accuracy of all the examples provided in its Report, as the information had come from a variety of sources, including pleadings, court decisions, media reports, and the public information, and had not been reviewed by the incumbent providers at issue." ¹⁷ And NATOA makes clear in its comments that *this is still the case*.

NATOA suggests that NCTA did not respond to the report presented to the Senate Judiciary Committee.¹⁸ This is wrong. On March 11, 2004, NCTA provided the Committee with a response to NATOA's allegations. A copy of that response is attached to these reply comments.

In its response, NCTA explained that "many of the allegations contained in the report are, in fact, stale, inaccurate or unverifiable." NCTA further observed that there are no cases in

¹⁵ *Id.* at 6-7.

¹⁶ *Id.* at 7.

¹⁷ *Id.*, n. 13.

¹⁸ Id. ("the Senate Judiciary Committee invited the National Cable & Telecommunications Association (NCTA) to respond to the report, and NATOA assumes that ... NCTA and its members will respond here in their reply briefs, if they wish to do so.")

Response of the National Cable & Telecommunications Association to Allegations Contained in NATOA's March 2003 Report as Submitted February 11, 2004 during the Subcommittee Hearing on "Cable Competition – Increasing Price; Increasing Value?," Subcommittee on Antitrust, Competition Policy and Consumer Rights, Committee on the Judiciary, United States Senate, Washington, D.C., Mar. 11, 2004, at 1 (Attachment B).

which "a judicial or regulatory body has confirmed the unfairness or unlawfulness of any of the conduct alleged in the report. Moreover, in several cases, the allegations raised in the NATOA Report have subsequently been considered and *rejected*."²⁰ The rejection of these allegations is

... not surprising because the actions described in the report are generally not anticompetitive and harmful to consumers. Quite to the contrary, <u>offering lower prices</u> or promotions to attract or win back customers from competitors is not something that generally thwarts competition; it *is* competition, and consumers are the beneficiaries. Only in very limited circumstances are such tactics ever viewed as "predatory" and anticompetitive – and those circumstances do not exist in the examples of supposedly predatory conduct set forth in NATOA's report.²¹

While NATOA's objections to an incumbent's competitive response might find support among overbuilders, who use pricing promotion as an entry strategy, it is not clear why NATOA wants the Commission to deprive consumers of promotional cable discounts. Such discounts are the very essence of competition.

III. THE PROGRAM ACCESS RULES SHOULD NOT BE EXPANDED TO ENCOMPASS TERRESTRIALLY-DELIVERED PROGRAM NETWORKS OR SATELLITE-DELIVERED PROGRAM NETWORKS THAT ARE NOT VERTICALLY INTEGRATED

As in past years, various parties seek further government intervention in the programming marketplace by calling for the expansion of the program access rules. This year, DIRECTV, EchoStar, RCN, BSPA and Verizon all seek this artificial boost to their ability to compete. BSPA, for example, argues that "all competing distributors should have the same access to content as cable incumbents at the same prices." The adoption of this and similar proposals would strike the wrong balance, effectively imposing "duty to deal on equal terms" obligations on any program network carried on any cable system. As we noted in response to the

²⁰ *Id.* (emphasis in original).

²¹ *Id.* at 1-2 (emphasis in original).

²² BSPA Comments at 13.

same arguments in last year's video competition proceeding: "The inescapable conclusion is that BSPA, RCN, and DIRECTV want the government to mandate their ability to carry any and all programming carried on cable systems. Congress has rejected this policy judgment, and given current marketplace circumstances, the Commission ought to reject it out of hand."²³

It was only in 2002, in the course of its comprehensive consideration of whether to extend the prohibition on exclusive programming contracts by vertically-integrated providers of satellite-delivered programming, that the Commission declined to apply the program access rules to terrestrially-delivered programming.²⁴ The Commission then found:

The language of Section 628 (c) expressly applies to "satellite cable programming and satellite broadcast programming," and that terrestrially delivered programming is outside of the direct coverage of Section 628 (c). We have been presented with no basis to alter that conclusion in this proceeding. To the contrary, the legislative history to Section 628 reinforces our conclusion.²⁵

In its consideration of the program access provision, Congress made a choice between the Senate version that applied the program access rules to vertically-integrated satellite-delivered and terrestrially-delivered programming, and the House version that limited the application of program access to satellite programming delivered by vertically integrated providers. The Conference Report is clear that Congress adopted the House version, and in so doing limited the application of the program access provision to "satellite cable programming vendor[s] affiliated with a cable operator." Relying upon the statutory language and this legislative history, the Commission found in 2002 that "given this express decision by Congress to limit the scope of

NCTA Reply Comments, MB Docket No. 03-172, Sept. 26, 2003, at 8.

Implementation of the Consumer Protection and Competition Act of 1992, Development of Competition and Diversity in Video Programming Distribution: 628 (c) (5) of the Communications Act, Sunset of the Exclusive Contract Prohibition, 17 FCC Rcd 12124, 12158 (2002) (2002 Extension of Program Exclusivity).

²⁵ Id

²⁶ See H.R. Conf. Rep. No. 102-862, 102nd Cong., 2nd Sess. at 91-3 (1992).

the program access provisions to satellite delivered programming, we continue to believe that it applies only to satellite delivered cable and broadcast programming."²⁷

Nevertheless, cable's actual and potential competitors continue to seek Commission action, or a Commission recommendation to Congress, to expand the program access provision to include terrestrially delivered programming and satellite-delivered programming of providers that are not vertically integrated. Verizon is among the most vociferous advocates of government interference in what is and ought to be a private marketplace negotiation:

Without access to much terrestrially delivered programming – especially "must have" items like regional sports and news programming – new entrants are at a serious disadvantage when competing against incumbent cable companies. Certainly, access to programming is one key factor that overbuilders must consider when planning where to deploy their networks. In order to promote more competitive video offerings, the Commission should extend the program access rules so as to close the loophole for terrestrially delivered programming or, at the very least, should encourage Congress to do so.²⁸

Similar action is sought by DIRECTV, ²⁹ EchoStar, ³⁰ RCN³¹ and BSPA. ³²

As NCTA has previously pointed out,³³ it is wrong to characterize the terrestrial exemption as a "loophole." To the contrary, Congress struck a deliberate balance in 1992. It sought to ensure that cable's fledgling competitors would have sufficient access to popular programming while preserving the procompetitive benefits of exclusivity in order to foster new

²⁷ 2002 Extension of Program Exclusivity at 12158.

Verizon Comments, Jul. 23, 2004, at 17. Verizon calling for the expansion of program access regulations lest it be at a serious disadvantage brings to mind a biblical analogy. It is as if Goliath had demanded that unless David was deprived of his slingshot, Goliath would be at a "serious disadvantage."

²⁹ DIRECTV Comments at 18-23.

³⁰ EchoStar Comments, Jul. 23, 2004, at 12-13.

³¹ RCN Comments at 9-10.

³² BSPA Comments at 12-14.

See Letter of Steven K. Berry, NCTA Senior Vice President, Government Relations to Pete Levitas, Majority Staff Director and Chief Counsel, Senate Judiciary Subcommittee on Antitrust, Competition Policy and Consumer Rights, March 4, 2004.

program networks – especially local and regional programming networks. In the 1992 Cable

Act, Congress considered exclusivity – especially for local programming – to be desirable. And,
in fact, the terrestrial exemption has led cable operators to invest in local news and community
programming to distinguish cable providers from their fast-growing competitors.

The current law preserves incentives to engage in the significant financial risk-taking necessary to launch and promote local and regional program services. At the same time, overbuilders enjoy government-mandated access to hundreds of channels of available programming.

There are many reasons why overbuilders have had difficulty competing successfully in a vibrantly competitive video marketplace that now includes not only the incumbent cable operator but also two formidable national DBS providers. But no party has presented any credible evidence that limited exclusivity for a few channels among the hundreds otherwise available has had the effect of thwarting an overbuilder's ability to compete.

Nevertheless, despite clear congressional intent that the satellite-delivered programming obligation should last for only a limited period, as well as the vibrancy of MVPD competition, companies with the wherewithal to create and negotiate for programming continue to call for government assistance.³⁴ They seek Commission action or legislative recommendations to compel their access to non-covered programming. The Commission should reject these proposals, and it should encourage these companies to negotiate for programming in the marketplace and to invest in and develop new programming of interest to their subscribers.

Various parties seek other forms of government intervention to boost their businesses, and, in most instances, raise regulatory issues that are the subject of other FCC proceedings. Those parties include Paxson (digital must carry); EchoStar, Fox Cable, and American Cable Association (à la carte regulation); and the Consumer Electronics Association ("CEA") (navigation devices and the ban on integrated set top boxes). As the FCC has noted in years past, this proceeding is not the place to resolve these matters.

CONCLUSION

The marketplace realities are inescapable in this proceeding: competition for customers in the delivery of video programming is robust and more intense than ever. NCTA urges the Commission to report the full realization of this phenomenon to Congress in its 11th Annual Video Competition Report.

Respectfully submitted,

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Assessing the Policy Implications of Overbuild Competition

Steven S. Wildman Michigan State University February 9, 2004

I. Introduction

Unlike the situation prior to the emergence of the national direct broadcast satellite (DBS) television services in the mid-1990's, it is indisputable that cable operators face direct competition in the provision of their primary service, multichannel television. Today the local cable operator competes directly with two highly successful DBS services who, nationwide, have captured approximately 22 percent of all multichannel television service customers. Most operators also now offer a high speed Internet service for which they face competition from the incumbent local telephone company and frequently a number of other suppliers of high speed data services as well. And a small but growing fraction of cable operators offer voice telephony in competition with at least one, and increasingly, several telephone companies. The question now is whether this multifaceted competition, and especially the competition between the cable and DBS providers of multichannel video services, is intense enough to provide consumers with the benefits of lower prices and better services policymakers expect competition to provide.

¹ Federal Communications Commission, Annual Assessment of the Status of Video Competition in the Market for the Delivery of Video Programming, Tenth Annual Report, MB Docket No. 03-172, Released January 28, 2004, Appendix B, Table B-1.

In a tiny fraction (less than two percent) of the communities they serve, incumbent cable operators also compete with newer wireline providers of multichannel video service, commonly known as "overbuilders." Although it is not always the case, a few empirical studies have suggested that on average prices are lower in markets with overbuild competition than in markets where the incumbent is the only wireline provider of multichannel video service. These studies have not systematically controlled for short run factors, such as low introductory prices charged by recent entrants and the presence of competitors who are not viable long-term, that might drive prices below their competitive equilibrium levels. Nevertheless, their findings have been offered as evidence that prices charged by cable operators in non-overbuild communities are too high.

Unfortunately, the world is more complex than this simple argument would imply and the evidence offered is not, by itself, sufficient to support the claim that is made.

While the claim that lower prices in overbuilt communities are an indicator that prices in other cable communities are too high might be true, it may also be false. Because there are situations in which market prices may fall below the efficient market standard

² The most recent published study is an article by J. A. Karikari, S. M. Brown and A. D. Abramowitz, "Subscriptions for direct broadcast satellite and cable television in the US: an empirical analysis," *Information Economics and Policy*, vol. 15 (2003), pp. 1-15. Karikari, Brown and Abramowitz estimate that overbuild competition produces an approximately 10 percent reduction in cable prices. Their coefficient estimate is similar in magnitude to that found in an empirical study using earlier data by Dertouzos and Wildman, but the price effect in the Dertouzos and Wildman study was not statistically distinguishable from zero by commonly applied criteria for statistical significance. See, J. N. Dertouzos and S. S. Wildman, "Regulatory Standards: The Effect of Broadcast Signals on Cable Television," in R. Noll and M. Price, eds., *A Communications Cornucopia*, Brookings Institution, 1998. In its October 2003 Report, "Issues Related to Competition and Subscriber Rates in the Cable Television Industry," the GAO reports finding that overbuild competition reduced cable TV rates by about 15 percent.

associated with a competitive equilibrium, policymakers must take care to determine that the lower prices are in fact the efficient competitive prices and that the market structures generating those prices are sustainable in the long term. While consumers may benefit if supracompetitive prices are lowered, they may also be hurt by deteriorating quality and the exit of service providers if companies are forced to set prices below their competitive levels.

To convincingly demonstrate that lower prices in overbuild markets show that prices in non-overbuild markets are too high it would be necessary to provide: (1) evidence that cable prices charged in overbuild communities might reasonably be interpreted as competitive equilibrium prices, and (2) empirical support for the proposition that the prices (and numbers of competitors) observed in these markets would also be sustainable long-term in communities currently not served by overbuilders. Until evidence supporting the existence of both of these relationships is provided, the argument that lower prices in overbuild markets show that prices in other cable markets are too high must be considered empirically unsubstantiated. On the other hand, this argument would be empirically refuted by a demonstration that either of these relationships does not hold.

To this end, I have reviewed data on overbuild competitors and the communities they serve compiled from a NCTA-commissioned study by Kagan World Media³ and data descriptive of cable communities and markets from trade data sources. My review of this evidence suggests that it is highly likely that prices in overbuild communities are below long-run competitive levels and that, unless recent and/or new technological

³ Kagan World Media, "Survey of Incumbent Cable Operators in Overbuild Communities," January 2003. See Attachment A.

developments substantially change the economics of competition in multichannel video services, the overbuilders in these communities are not equilibrium features of the markets they serve. Furthermore, based on the US experience with overbuild competition to date, it would be dangerous to assume that overbuilders could profitably enter and offer services in the typical community in which a single cable company currently competes with the two satellite services.

The analysis that lead me to these conclusions is presented in the remainder of this report, which is organized as follows. Section II briefly describes the properties of a competitive equilibrium and identifies factors unrelated to differences in competitiveness that may lead to departures from a competitive equilibrium. Indicators of when such factors may be influencing overbuild markets are then discussed. Section III uses the framework presented in Section II to classify overbuilders and assess the long-term viability of overbuilders in current overbuild communities. The implications of this exercise for the interpretation of earlier studies comparing cable prices in communities with and without overbuild systems is then discussed. Section IV builds on the findings presented in Section III to examine the usefulness of the experience with overbuild services in the United States for assessing how close prices for cable services in communities without overbuilders come to their competitive equilibrium values. The findings of the study are summarized in Section V.

II. Competitive Prices and the Competitive Market Standard

A. Using the competitive market standard to judge market performance

The competitive price standard commonly employed in policy analyses is the long-run equilibrium price of the textbook model of a perfectly competitive market. In a perfectly competitive market in equilibrium, each buyer pays no more than the cost of the output purchased and sellers' revenues are just sufficient to cover their costs. Because price paid is a measure of value delivered to the buyer, this equation of cost with value at the margin indicates that the market is providing the maximum value possible with the resources at hand. The market output associated with this desirable state is the competitive equilibrium output or supply. Departures from equilibrium values for prices and outputs may rightly be interpreted as evidence that the societal resources employed to serve a market are not delivering the value they should. ⁴

Policy intervention may be warranted *if departures from equilibrium are not* naturally corrected by market forces. Thus, for example, if output was held below its competitive equilibrium value for an extended period of time, the increase in price attendant on the reduction in supply would be a measure of how much the added value to consumers from increasing output might exceed the cost of doing so. Similarly, if supply exceeded its competitive equilibrium value, price would fall to less than the cost of delivering the market's product or service, and the excess of cost over price could be

⁴ For a straightforward presentation of the basic argument for the efficiency advantages

of competitive equilibrium prices and quantities, see F. M. Scherer, <u>Industrial Market Structure and Economic Performance</u>, Second Edition, Rand McNally Publishing

Company: Chicago, 1980, Chapter 2.

interpreted as a measure of how much more value the resources employed could contribute to society if used to create other goods and services.

Because observed prices may be above or below their competitive market values, the simple observation that the price for a product or service is lower in one market than in another is not sufficient to determine which, if either, is closest to the competitive equilibrium price. For this reason, policy-driven comparisons of prices in different markets must be sensitive to the implications of factors that may cause prices (and numbers of competitors) to depart from their equilibrium values. Analysts must also be sensitive to the possibility that differences in underlying demand and/or cost conditions may lead to differences among markets in equilibrium prices and numbers of competitors, which is considered in Section IV. The remainder of this section focuses on factors that may cause prices and numbers of competitors to differ from equilibrium values and how these might be incorporated in a study of competition in the supply of multichannel subscription television services.

Four types of factors other than deficiencies in the competitive process may cause prices and numbers of competitors to depart from their competitive equilibrium values. These are: (1) Errors in judgment by entrants, potential entrants and incumbents, which may include bets on new technologies, (2) Changes in market conditions, (3) Low, but unsustainable, introductory prices, and (4) Government policies. Each of these four types of factors should be considered in constructing a sample of communities with overbuilders, which I will call a comparison sample, to be compared with communities not served by overbuilders to assess the competitive performance of the latter.

B. Errors in judgment by entrants, potential entrants, and incumbents

The ideal of a competitive equilibrium that has become a touchstone of competition policy analysis is an analytical abstraction, the properties of which rest on a set of assumptions that are at best only approximated in real world markets. Critical among these assumptions is that market participants be completely informed about cost and demand conditions and about the strategies employed by their competitors. The reality, of course, is that market participants are never perfectly informed and are constantly scouring the market and the larger economic and political environment for bits of information that might help them better align their strategies with the true states of the markets they serve. Because they must work with incomplete information, the decision to commit resources to provide service in a market always entails some risk of loss as well as the possibility of gain. ⁵ This is true for firms already serving a market as well as for firms contemplating entry.

Entry in competitive markets is always an uncertain prospect because entrants must predict on the basis of incomplete information the reception their products will receive once they are introduced and the costs they will incur in supplying them.

Potential entrants may err by both underestimating the profits they might earn if they enter and by overestimating their post-entry profits. Both types of mistakes will be corrected by the market in the long run, but the short term impacts will be quite different. The first type of mistake will be corrected either through the entry of other firms who more accurately assess their prospects, or as high prices and high profits earned by

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⁵ For a recent treatment of how uncertainty about demand conditions influences firms' entry strategies, see G. Pacheco-de-Ameida and P. Zemsky, "The Effect of Time-to-Build on Strategic Investment Under Uncertainty," <u>RAND Journal of Economics</u>, Vol. 34 (2003), pp. 166-182,

incumbents cause initially unenthusiastic potential entrants to change their minds. The short-term consequences of potential entrants' failures to take advantage of opportunities for profitable entry will thus be prices that exceed their competitive equilibrium values. It is important to note, however, that prices that exceed competitive equilibrium levels are not evidence that markets that are less than competitive if there is nothing to prevent the entry of new competitors to bring about the efficient competitive outcome in the long term.

The price-effects of entry spurred by overly-optimistic predictions of post-entry profits are just the opposite of those for overly pessimistic forecasts that delay entry in markets where entrants could prosper. When the number of firms in a market exceeds the number the market can realistically support, the competition to determine who remains in the market will often drive prices to levels that are too low to cover the costs of investments and ongoing operations in the long term. Visible signs of failed investments of this type would include business closures, reorganizations under the protection of bankruptcy, and the sale of assets at less than their original cost. However, not all failed investments will be publicly revealed because owners with sufficient resources may choose to keep open business that cover their operating costs even if they don't fully recover their sunk investments.

Just as entrants may misjudge market circumstances or their own capabilities and enter when it is inefficient to do so, so may incumbents invest in new services or capacity that fail to generate revenues commensurate with their costs. Depending on their magnitude, incumbent mistakes of this type may lead to the same financial consequences just described for failed entrants.

Incumbents may also make mistakes that encourage entry in situations in which it would not normally occur. For example, an incumbent cable operator, whether through inattentiveness, lack of capital, or a wrong bet on the direction and implications of technological change, may fail to upgrade its plant in a timely manner, leaving it unable to supply the quality, breadth and variety of services a more up-to-date operator could profitably provide. Because a market served by such an operator is in effect underserved, an opening may be created for profitable entry that would not have arisen had the incumbent been on its toes. The consequences of entry of this type are good for consumers, and, because the threat of entry by suppliers using more advanced technology gives incumbents an incentive to continually improve their services, beneficial to society at large.

Nevertheless, as long as entry in response to incumbent inefficiency remains the exception rather than the rule, it would be inappropriate to regard prices in markets where this occurs as reliable benchmarks for evaluating cable prices generally. The competitive equilibrium standard assumes a market served by efficient competitors and in the long run it must be expected that inefficient cable operators will exit the markets they currently serve. Evidence that entrants were responding to opportunities created by inefficient incumbents would include entry concentrated in markets where incumbents failed to keep up with the rest of the industry in upgrading their services and facilities.

C. Changes in market conditions

Equilibrium prices and the number of firms a competitive market can support may both change with changes in market demand and changes in the costs firms incur in supplying the market. Increased demand is typically associated with a larger number of firms in equilibrium while increases in costs tend to increase equilibrium prices and may reduce the number of viable competitors. Of course the opposite is true when demand and costs fall. Because entry and exit are both time consuming processes, new equilibria may lag considerably the changes that produced them and prices during the transition may differ considerably from their values in either the original or the new equilibrium.

New technologies are important agents of market change. ⁶ Advances in technology may lower costs or make possible delivery of combinations of services that were not feasible with earlier generations of technology. New firms can be expected to adopt these technologies from their inception, while incumbents may find it more prudent to adopt them more slowly over time as they replace or enhance existing facilities.

Anticipated cost savings and the possibility of selling different mixes of services may stimulate entry in markets where entry otherwise would not have occurred. Optimism based on the allure of new technologies often turns out to be unfounded, however, and ventures built on them may fail, as we recently witnessed with the implosion of so may of the early dotcom businesses. But even when the investments supporting technology-driven entry are proved wise in hindsight, it is inappropriate to view post entry prices as

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⁶ For example, D. Clark shows how evolution in the local loop technology underlying Internet access may change the nature of competition to provide Internet access to consumers. D. Clark, "Implications of Local Loop Technology for Industry Structure," in S. E. Gillett and I. Vogelsang, eds., <u>Competition, Regulation, and Convergence:</u> <u>Current Trends in Telecommunications Policy Research</u>, Lawrence Erlbaum Associates, Publishers: Mahwah, NJ, 1999, pp. 283-296.

evidence of what competitive prices would have been pre-entry with the older technology. Instead, costs and prices are likely to depend on the technology employed. Furthermore, entrants employing new technologies should not be counted as permanent features of their markets until they have demonstrated the viability of their business plans.

D. Low, but unsustainable, introductory prices

It is not uncommon for firms entering a market to offer their products or services at prices too low to cover their costs over the long term. They do this to rapidly build their customer base to a level large enough to ensure profitability once prices return to sustainable levels. Incumbents often respond to such tactics with lower prices of their own. Because market prices frequently rebound to higher levels once entrants' initial price-cutting strategies have run their course, it is important that prices in markets with recent entry not be used as competitive benchmarks for prices in other markets.

E. Government policies.

Due to their powers of taxation and regulation, decisions made by governments at all levels may significantly affect the costs of doing business and the prices charged by firms serving local markets. As a result, differences in local government policies may lead to substantial differences in local prices and the numbers of firms serving local markets

Privately-owned cable operators must acquire franchises to provide service from local regulatory authorities, and franchises are typically awarded contingent on the operator meeting obligations specified by the local authority. Such obligations may

substantially increase the cost to an operator of providing service in a local community. Variation in franchise obligations is one reason cable prices may differ among communities. Because franchise obligations influence costs, they also affect the prospects for entry by new cable providers. Results of the survey described in more detail later in this report suggest that in a number of communities franchise authorities have favored entrants with less onerous, and thus less costly, franchise obligations than those of the incumbent operators already serving these markets. While the cost advantages of more favorable regulatory treatment may be a powerful inducement to entry in some markets, and prices may fall when entry occurs, it clearly would be a mistake to attribute either entry or any subsequent reductions in prices to the workings of competitive forces when the entry occurs in response to a regulatory advantage.

In a number of overbuild communities, the competition to a privately-owned incumbent operator comes from a government-owned system. Because a cable system operated as a government service serves both political and economic goals, and especially because the economic constraint of earning a market-return on capital investments cannot be assumed to apply to government-owned enterprises, it would be inappropriate to use prices in markets with government-owned systems as benchmarks for competitive prices.

III. Overbuilder Viability and the Questionable Value of Price Comparisons

The discussion of Section II makes clear that a number of factors might cause the prices and numbers of competitors in a market to depart from their long-run competitive values. For this reason, if comparisons of overbuild markets to markets without overbuilders are employed to inform a policy analysis, it is important that the overbuild

markets employed be ones for which the likelihood is small that prices and numbers of competitors differ substantially from the competitive equilibrium values for these markets. While it is not possible in practice to guarantee that prices and the number of competitors observed in any given market are at their long-run equilibrium values, it is possible with the framework developed in Section II to identify markets mostly likely to be tainted by factors known to be potential sources of bias and exclude them from any comparison samples.

This section reports the results of such an exercise using data for a sample of 433 communities with an overbuilder presence⁷ (the overbuild data set), based on a study of overbuilders by Kagan World Media commissioned by NCTA, which was supplemented with additional information from trade data sources compiled by NCTA. The analysis presented in this report is a secondary analysis of this data. The sample and the methodology employed in constructing it are described in Section III.A. A set of potential comparison samples constructed using the framework developed in Section III is described in Section III.B. The implications of this exercise in classification and comparison sample construction for policy interpretations of comparisons of prices in cable communities with and without overbuild services are discussed in Section III.C.

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⁷ Some of the overbuild franchises awarded were not built out or never offered service. The data set includes these communities along with those built out that offered service as communities with an overbuilder presence.

⁸ Kagan World Media, "Survey of Incumbent Cable Operators in Overbuild Communities," January 2003.

A. The overbuild data set

NCTA retained veteran cable industry analyst John Mansell of Kagan World Media to conduct and supervise the data collection regarding overbuilds from the incumbent cable operator in each overbuild market with the goal of identifying and gathering information on all of the wireline systems that compete with incumbent cable television systems in the United States. NCTA used Kagan World Media data from the 2003 Broadband Cable Financial Databook⁹ to identify 465 "Cable TV competitive franchises," which Kagan considers a near-comprehensive listing of existing overbuild franchises as of mid-2003 when the data in the Databook was compiled. The Kagan data lists the City and State and name of each Overbuilder. NCTA used a Nielsen Media Research database (FOCUS) to identify the incumbent cable system operators in each of these communities. NCTA then developed a survey instrument to collect information about the challenger in each market. Specifically, the survey included questions addressing the following overbuilder characteristics:

- 1. Name of current overbuilder.
- 2. The year in which overbuild commenced service.
- 3. Capacity of overbuilder (in MHz)
- 4. List of services offered by overbuilder.
- 5. Ownership Information. Is the overbuild owned by local government (town, city or county), a utility company (gas, electric), a local telephone company, a co-op, or privately owned.
- 6. Name of incumbent at the time of overbuild.
- 7. Similarity of build-out requirements.
- 8. Demographics of neighborhoods where overbuild currently offers service.
- 9. The population density of the markets targeted.

⁹ Kagan World Media, 2003 Broadband Cable Financial Databook, pp.81-84.

- 10. Sales/acquisition information. Whether current owner is the original owner and sales price if not.
- 11. Similarity of franchising requirements to those of incumbent.

The survey of incumbent cable operators was conducted between October 21, 2003 and January 2, 2004. Each MSO (or individual system if not affiliated with the Top 10 MSOs) was provided an electronic copy of the questionnaire and a list of communities where their companies faced a wireline competitor according to the Kagan data. In some cases, the MSOs collected the data directly from their cable systems and forwarded their results on to John Mansell and in other cases the data was collected by Mansell at the system level. Since a few overbuilders have exited the business in recent years, public information about these companies was used to collect data for these observations. All data gathered from the questionnaires and public sources were tabulated electronically by Mansell to create the spreadsheet attached to this report.

In total, information on 433 communities was collected and compiled. Because survey respondents identified several overbuilders that had entered their communities in late 2003 or early 2004 after Kagan stopped collecting information for the 2003 Databook, the final tally was 470 identified communities with an overbuilder presence. Survey respondents did not provide information for 39 of the 114 former Ameritech New Media franchises sold by SBC to WideOpenWest, which is two more than the difference between the 470 communities identified and the 433 in the sample for which information was collected. This suggests that two of the former Ameritech New Media franchises

may have been missed in the Kagan census of cable communities, or, perhaps shut down since their sale to WideOpenWest.¹⁰

B. Constructing comparison samples

Of the 433 overbuild communities identified by the survey, 62 had overbuilders that had already failed, 11 six were identified as failing, 12 and 15 had not yet begun to build out their franchises or were not yet offering service at the time of the survey.

Clearly failed and failing franchises do not belong in a comparison sample, and systems that are not operating provide no performance measures. Therefore all 83 communities with failed, failing and not built systems were eliminated from the comparison sample. These deletions reduced the sample to 350.

While not classified as failed or failing systems because they are still in business and offering service, an additional 76 communities were served by overbuilders who purchased their plant from previous owners at a small fraction of the original construction cost. (Systems serving 77 communities were sold for less than cost, but one of them also failed.) The fact that the original owners of these systems were forced to sell them for substantial discounts relative to their investments in them shows that that the markets they served did not generate revenues sufficient to both cover their operating costs and provide a fair return on upfront investments. There are numerous potential buyers capable of operating these systems. Therefore, the ability of the actual buyers to pick up

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¹⁰ All 114 of the former Ameritech New Media systems are assumed to still be providing service in their franchise communities in various calculations reported below.

¹¹ This includes operators who failed after offering services, which is the majority of this category, and operators who experienced financial failure before commencing service.

¹² These operators were either in the process of filing for bankruptcy or in negotiations with creditors.

them up at pennies on the dollar shows that they would not have been willing to pay the full costs of building these systems if that were the price of entry. Systems in these communities are properly classified as the types of investor mistakes that will be eliminated from competitive markets in the long run. Subtracting the 76 systems purchased for less than original construction costs leaves 274 systems in the comparison sample.

31 of the communities with overbuilders were served by municipally-owned systems, but one is one of the failed systems eliminated above. Because such systems are likely to be operated to address political as well as economic goals, and because access to public funding is likely to be reflected in both build and pricing decisions, these systems must also be eliminated from the comparison sample, leaving a total of 244.

244 is the absolute maximum number of overbuild communities that might retained in the comparison sample. Call this sample CS1. There are several reasons to believe that the number of communities served by overbuilders where two cable services might plausibly be viable in a competitive equilibrium is substantially smaller than the 244 communities in CS1. One reason is the 107 communities identified by survey participants where the overbuilder came in with new plant to compete against an incumbent who had fallen behind industry standards in upgrading its facilities. As explained in Section II, an inefficient incumbent may create an attractive opportunity for a more efficient entrant, but the competitive equilibrium used as a standard for policymaking is one in which efficient firms compete against each other. To ensure that the comparison sample is not tainted by the inclusion of communities whose overbuilders entered in response to incumbent incompetence, overbuild communities where the

incumbent operates outdated plant should be eliminated from the comparison sample as well.

Overbuilders in eight of the 107 overbuild communities with incumbents operating outdated systems were municipally owned, 52 were purchased at a fraction of construction cost, four had failed or failing systems, and one had a failed/failing system purchased at a fraction of its buildout cost. As all of these communities were already excluded from CS1, we are left with an additional 42 overbuild communities served by inefficient incumbents that probably should be subtracted from CS1 to ensure that inefficient incumbents do not bias the sample. Call the resulting sample CS2. CS2 has 202 cable communities.

A second reason to believe that that CS1 includes many communities where overbuild competition is not likely to be sustained in a competitive equilibrium is that the 76 communities served by overbuilders who purchased prior operators' assets for less than construction cost were identified through publicly-available documents. These are all the communities for which system cost and purchase price was found. An additional 39 communities served by systems operated by second or subsequent owners were identified by survey respondents. Given the numbers of failed and failing systems and the fact that systems for which information on construction cost and sales price was found were sold at less than cost, it seems likely that many, if not most, of the resold systems for which construction cost and purchase price were not available were also sold at a loss. At any rate, the strong possibility that they were sold for less than cost suggests that they should be eliminated from the comparison sample. In six of the communities served by these second (or subsequent) owner systems, the incumbent was operating outdated plant

and thus was already eliminated from the comparison sample. If we subtract the remaining 33 communities from CS2 to completely eliminate the possibility that failed systems are included in the comparison sample, we are left with 169 communities. Call this sample CS3.

The possibility that local politics played a role in entry decisions must be also be considered in situations in which overbuilders' franchise authority-imposed conditions for operation differ from those required of the incumbent. This is a third reason to believe that CS1, as well as CS2 and CS3, includes communities in which overbuilders would not be viable in a true competitive equilibrium. While cost advantages based on regulatory favoritism may be a reason for entry, entry in such cases cannot be considered the outcome of a competitive process. Respondents to the survey identified a total of 96 communities for which the overbuilder did not have the same franchise requirements as the incumbent and 103 communities where the overbuilder was not required to serve the entire franchise area. To eliminate the possibility that the overbuilder's entry decision was based on favorable regulatory treatment, communities where the overbuilder and the incumbent have different franchise and build-out requirements should also be eliminated from the comparison sample. Subtracting these communities from CS1, CS2 and CS3 would produce the most restricted, but methodologically purest, comparison samples. Call these purer samples CS1P, CS2P and CS3P. CS1P has 131 communities, CS2P has 109 communities, and CS3P has 94 communities. It is striking how few communities remain in the comparison sample when all *identifiable* sources of potential bias are eliminated.

Table 1

Eliminating Sources of Bias from Comparison Samples

Complete Sample	CS1	CS2	CS3	CS1P	CS2P	CS3P
433	244	202	169	131	109	94

A fourth reason to believe that all the comparison samples just described, including the last three, include communities served by systems that are not long-term viable is that the vast majority of systems for which no financial information was available were assumed to be viable. That is, if some of the systems for which no financial data was available were failing, they would have been misclassified as viable. If overbuilders for which financial data is not available experience financial difficulties and failure at the same rate as those for which data is available, then most of these systems have been misclassified. In addition, the newness of many of the overbuilders in the sample also introduces a bias against a failed or failing classification because the process of failure has not yet had time to work itself out, which is a fifth reason to believe that the comparison samples include communities served by systems that in the long run will be proved nonviable.

C. The questionable relevance of overbuild price studies for cable policy

The question of whether overbuild competition lowers cable prices is relevant for policymaking only if the overbuilders in the overbuild communities examined are realizing market returns on their infrastructure investments. The results of the study of

overbuilder viability reported in Section III.B show that it would be incautious to assume long-term viability for more than a small fraction of existing overbuilders. For the remaining systems, any effects they might have on prices in the markets they serve should be considered departures from equilibrium prices. Because studies of the price effects of overbuild competition reported to date did not control for viability with anything close to the rigor applied in the study reported in Section III.B, the odds are high that many, and perhaps most, of the overbuilders included in these studies were the products of failed investments. This being the case, it would be inappropriate to rely on the findings of these studies to assess the competitiveness of cable prices in communities without overbuilders

IV. The Real Lessons from the US Experience with Overbuild Competition

The statistics on indicators of overbuilder viability presented in Section II.B provide strong reasons to suspect that most of the current crop of overbuild services likely are not viable participants in the markets they serve in the long term. The 365 communities currently served by privately-owned overbuilders constitute just 1.1% of the approximately 33,000 cable-served communities in the United States. The fact that overbuilders are offering services in such a small fraction of US cable communities suggests that in general potential investors in such services view their prospects as poor. The trend of overbuilder entry over time tells the same story. Table 2 presents data on the number of communities in the entire Kagan sample entered by privately-owned overbuilders for two-year intervals from 1995 through the present.

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¹³ 365 is calculated as 433 communities in the sample minus a total of 77 that either never offered service or failed minus 30 operating municipally-owned systems plus 39 former Ameritech New Media franchises not in the sample but assumed to still be operating. This count includes a handful of co-operatives that may be non-profit.

Table 2
Overbuilder Entry Over Time
(built-out commercial systems)

Pre-1995	1995-1996	1997-1998	1999-2000	2001-2002	2003-2004	No Entry Date
33	46	66	77	70	17	42

The Cable Act of 1992¹⁴ eliminated any statutory authority local franchise authorities may once have had to restrict franchise awards to incumbent providers and the Telecommunications Act of 1996¹⁵ (Telecom Act) provided further encouragement to entry in local markets for communications services, including cable. The pace of overbuilder entry did increase beginning in 1997, but this also coincided with increased adoption of new technologies that would allow the provision of high speed data and telephone services over cable plant throughout the cable industry, so it is difficult to know to what extent the Telecom Act, as opposed to the lure of new technologies, influenced the pace of overbuilder entry.

Missing data on entry dates for some communities make it impossible to determine exactly how much entry occurred in each of the periods listed in Table 2, but we can determine reasonable upper bounds on the rate of entry. The 17 startups identified for 2003-2004 represent Kagan observations for a little more than the first half of 2003 plus a few additional entrants identified by survey respondents after that time. If

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¹⁴ 47 USC § 541 (a) (1).

¹⁵ 47 USC §§ 251et seq.

we assume all 17 started up in the first half of 2003, this would reflect a two-year entry rate of 68, which is close to the pace of entry for the prior three two-year periods. Entry date is provided for 74 of the 75 former Ameritech New Media communities in the sample, and all were from 1996 to 2001. If we assign the remaining 39 Ameritech New Media franchises to the six years from 1977 through 2002, total private entry would have been 252, or 42 per year. This pace amounts to entry into just under thirteen one-hundredths of one percent (0.0013) of US cable communities annually.

Data on the technology deployed in communities with overbuilders presented later in Table 3 shows that a higher percentage of the 42 communities for which date of overbuilder entry was not provided are served by overbuild systems utilizing last generation technology with no advanced features than is indicated for the pre-1995 communities in the built-out sample. If we assume instead that entry in all of these communities occurred from 1997 through 2002, total entry during the period would have been 294, the average annual rate of entry would have been 49, and the average fraction of cable communities entered annually would have been fifteen one-hundredths of one percent (0.0015).

These figures on the pace of overbuilder entry may be interpreted in either of two ways. If, counter to the evidence developed in Section III, overbuilders are assumed viable in all of the communities they serve, the failure of the overbuild strategy to catch on elsewhere suggests that potential investors in overbuild systems have serious doubts that they can be profitable in other cable communities. That is, the capital market response to the experience with overbuild operations accumulated in the US to date

suggests that there is little confidence a second cable system can be viable in a typical cable community.

The second interpretation of the data on entry presented above is more consistent with the evidence on overbuilder viability presented in Section III.B. That is that the capital market has seen overbuild operations fail repeatedly and has concluded that in general overbuild systems are not good business opportunities. By both interpretations of the entry data, it seems clear that investors have concluded that in general competitive markets that include two satellite services will not support a second cable provider of multichannel video services, at least with the technologies currently available.

If there are exceptions to this general conclusion, the best bets would seem to be overbuilds operated by telephone companies and co-operatives in small rural communities. Of the 382 communities in the sample with built out systems, a total of 244 survived the various elimination criteria to be included in CS1, for a survival rate of 64 percent. Yet of the 89 communities with built out systems currently operated by telephone companies, 86 are in CS1. These communities are predominantly small and rural. Community population is available for 76 of the 86 communities in CS1 served by telco-owned systems. Nearly 59 percent have fewer than 15,000 residents, 47 percent are communities with fewer than 10,000 residents, and approximately 36 percent are communities with fewer than 5,000 residents. Over six percent of these telco-served communities have fewer than 1,500 residents. All ten built-out communities served by

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¹⁶ The 39 former Ameritech New Media systems not included in the larger sample would not have been in CS1 in any case because Ameritech New Media sold its systems to WideOpenWest for substantially less than the cost of building them.

cable co-operatives are in CS1.¹⁷ Nine of these communities had fewer than 10,000 residents, six had fewer than 5,000. (Population was not listed for one of the co-op communities.)

It is not clear why rural telephone companies and co-operatives may be more successful than other types of owners as operators of overbuild systems. One possibility is that closer relationships with customers in smaller communities make it easier for rural telephone companies to sell new services, and perhaps the co-operative organizational form may have advantages in small, close-knit communities. It may also be the case that with convergence the natural long-run market structure in small communities is one with a single wireline provider of video, high speed data and voice services and what we are witnessing is a necessary step toward that future if the local telephone company is to be the surviving wireline competitor. Whatever the reason, the character of these rural settings likely is not replicable in the more typical urban cable communities.

A closer look at the data collected in the Kagan study suggests that most of the more recent overbuild experiments were inspired by the capabilities of relatively recent technological advances that make it possible to use cable plant to provide telephony and high speed Internet service in addition to more traditional video services. Table 3 adds to the entry data reported in Table 2 numbers and percentages of entrants offering the combination of video, high-speed Internet and telephony (the three bundled services) and the numbers of entrants offering either the three bundled services or the two services of video plus high speed Internet service.

¹⁷ Systems serving two of the overbuild communities operated by telephone co-operatives were counted as co-op operated rather than telephone company operated.

Table 3
New Technology and Overbuild Entry Decisions

(built-out commercial systems)

	Pre- 1995	1995- 1996	1997- 1998	1999- 2000	2001- 2002	2003- 2004	No Entry Date
Number of Communities	33	46	66	77	70	17	42
# 3 Bundled Services	7	15	30	61	38	14	3
% 3 Bundled Services	21.2%	32.6%	45.5%	79.2%	54.3%	82.4%	7.1%
# HSD or 3 Bundled Services	23	40	61	70	63	15	12
% HSD or 3 Bundled Services	69.7%	87.0%	92.4%	90.9%	90.0%	88.2%	28.6%

Table 3 shows a heavy reliance on high-speed data or high-speed data and telephony technology strategies by overbuilders, including those who entered prior to the Telecom Act, and that reliance on multi-service platforms has in general been increasing over time. Notable is the growing percentage of overbuilders offering video services, high speed Internet service, and telephony, which has averaged well over 50 percent from 1999 on.

As was discussed in Section II, new entrants into established markets are often inspired by the potential they perceive in new technologies. It is also frequently the case

that pre-entry optimism is shown unwarranted by the post-entry market responses to the entrants' products and services. At least at this point, capital markets appear to have concluded that the overbuilder strategy is not one that can profitably be applied in most cable markets, even when it is supported by advanced distribution technology and triple play service offerings. However, even if this were not the case and we restricted our attention to overbuilders with the most technologically advanced systems, it would still be inappropriate to assume that prices observed in overbuild communities are the prices that should prevail in communities without overbuild systems. If the future is one in which all wireline competitors offer multi-service bundles, we are still early in the transition to that future. Because the new technologies imply different cost structures and, with multi-service offerings, new strategies for exploiting demand, there is no way to know how competitive prices with the new technologies will compare to competitive prices with the old technologies, or how prices might move during a period of transition.

V. Conclusions

A close look at overbuilders and the communities they serve shows that it would be imprudent to use prices in these communities as benchmarks for evaluating prices in other cable communities. The competitive price standard employed for policy analysis assumes competition among firms able to cover their investment and operating costs from the revenues they generate. The evidence reviewed in this report suggests that this likely is not the case for many, and perhaps most, of the overbuilders operating in the United States today. To the contrary, the evidence for a high rate of financial failure is compelling and it would be analytically inappropriate to view the effects on price of

systems that can't recover their own investment costs as evidence of how competitive multichannel video markets should behave.

The fact that only a tiny fraction of a percent of cable communities attract overbuilder entry in any given year in itself suggests that most knowledgeable potential investors see little prospects for profit in the overbuilder strategy. Empirical studies of the price effects of overbuild competition have not controlled for overbuilder viability or for the possibility that new overbuilders may be charging low introductory prices to rapidly build market share. For this reason, these studies shed no light on what competitive cable service prices might be. Even if this was not the case, the failure of capital markets to support a broad rollout of overbuild systems suggests that the conditions under which overbuild operations can thrive are quite different from those in the typical cable community.

CITY	ST	CHALLENGER	Population	Began	Not Orginial Owner	Offers High- Speed Internet	Offers Bundled Services (Voice, Video, Data	New Firm that purchased assets for small fraction of orginal costs
20 cities	RI	ABI						
La Crescent	MN	ACE Comm.	4,239	2003		✓	✓	
Camarillo	CA	Adelphia	57,077					
Encinitas	CA	Adelphia	58,014	1991	✓	√		
Malibu	CA	Adelphia	12,575	1996	✓	√		
Oxnard	CA	Adelphia	170,358		✓	√		
Port Hueneme	CA	Adelphia	21,845	1998	✓	√		
San Marcos	CA	Adelphia	54,977	1991	✓	√		
Ventura	CA	Adelphia	100,916			√		
Flora	IL	Advance Technologies	5,086	2002		√		
Alameda	CA	Alameda Power	72,259	2002		√		
Algona	IA	Algona Municipal Util.	5,741	2002		√	√	
Evanston	WY	All West Comm.	11,507	2001		√	✓	
Alta	IA	Altatec	1,865	2000		√		
Arcadia	CA	Altrio	53,054	2001		√	√	
Monrovia	CA	Altrio	36,949	2002		✓	√	
San Gabriel Valley	CA	Altrio	39,084	2001		✓	√	
Sierra Madre	CA	Altrio	10,578	2004		√	√	
Ann Arbor	MI	American Broadband	114,024					
E. Lansing	MI	American Broadband	46,525					
Lansing	MI	American Broadband	119,128					
St. Joseph Twp.	MN	Astound Broadband	4,681	2001		√		
Pultney	ОН	Bellaire Cable TV	4,892	1978				
Bartlett	TN	BellSouth						
South Dade County	FL	BellSouth	2,253,362	1999				
Winder	GA	BellSouth	10,201					
Cherokee County	GA	BellSouth Entertainment	141,903	1996	✓	√	√	
Cobb County	GA	BellSouth Entertainment	607,751	1996		√	✓	
Duluth	GA	BellSouth Entertainment	22,122	1996		√	✓	
Gwinnett County	GA	BellSouth Entertainment	588,448	1996		√	✓	
Roswell	GA	BellSouth Entertainment	79,334	1996		√	✓	
Woodstock	GA	BellSouth Entertainment	10,050	1996		√	✓	
Chamblee	GA	BellSouth Interactive	9,552					

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CITY	ST	CHALLENGER	Population	Doggo	Not Orginial Owner	Offers High- Speed Internet	Offers Bundled Services (Voice,	New Firm that purchased assets for small fraction of orginal costs
DeKalb	GA	BellSouth Interactive	665,865	Began	Owner	internet	video, Data) or orginal costs
			005,805	1000		✓	✓	
St. John's County	FL	BellSouth Interactive	0.500	1999		V	V	
Fallowfield	PA	Bentleyville Cable	2,502	1998				
Albany	NY	Berkshire Tel	1,275	1995		√		
Rapid City	SD	Black Hills GLA	59,607	2001		✓	✓	
Skagit County	WA	Black Rock Cable	102,979					
Snohomish County	WA	Black Rock Cable	606,024					
Whatcom County	WA	Black Rock Cable	166,814					
Braintree	MA	Braintree Elec. Light	33,828	2001		✓		
Elizabethtown/Hardi	KY	Brandenburg Telecom	22,542	2001		✓	✓	
Ocala	FL	BrightHouse	45,943	1979		✓	✓	
Abington	VA	Bristol Virginia Utilities	7,780	2003		✓	✓	
Glade Spring	VA	Bristol Virginia Utilities	1,374	2003		✓	✓	
Horton Twp.	PA	Brockway TV		1997				
Kane	PA	Brockway TV	4,126	1997				
Bryan	ОН	Bryan Municipal Cable	1,833	1999		✓		
Waterville	ОН	Buckeye Cable	4,828	1999		✓		
Maryland Hts	MO	Cable America	25,756	1991		✓		
Mesa	AZ	Cable America	396,375	1988		✓		
Sacramento	CA	Cable America	407,018	1990		✓		
Cameron	LA	Cameron Tel.	1,965	2003		✓	✓	
Hackberry	LA	Cameron Tel.	1,699	2003		✓	✓	
Charlotte	NC	Carolina Broadband	540,828					
Columbia	SC	Carolina Broadband	116,278					
Durham	NC	Carolina Broadband	187,035					
Greensboro	NC	Carolina Broadband	223,891					
Greenville	SC	Carolina Broadband	56,002					
Raleigh	NC	Carolina Broadband	276,093					
Spartanburg	SC	Carolina Broadband	39,673					
Winston Salem	NC	Carolina Broadband	185,776					
Cedar Falls	IA	Cedar Falls Utilities	36,145	1996		√	✓	
Clearview	WV	Centre TV	590	1979				
Ohio County	WV	Centre TV	47,427	1979				

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					Not Orginial	Offers High- Speed	Offers Bundled Services (Voice,	New Firm that purchased assets for small fraction
CITY	ST	CHALLENGER	Population	Began	Owner	Internet	Video, Data)	of orginal costs
Warwood	WV	Centre TV		1979				
Urbana	OH	Champaign County Tel	11,613	2001		✓	✓	
Denver	CO	Champion Broadband	554,636	2000		✓	✓	
Lakewood	CO	Champion Broadband	144,126	2000		✓	✓	
Kanawha County	WV	Charter	200,073	1985		✓		
Terre Haute	IN	Charter	59,614	1992	. ✓			
Danville	VA	Chatmoss Tel.	48,411	1991				
Hayward	MN	Chequamegon Coop	249	2001		✓	✓	
Barron	WI	Chibardun Coop	3,248	1998	1	✓	✓	
Camron	WI	Chibardun Coop	1,546	1998	3	✓	✓	
Chetek	WI	Chibardun Coop	2,180	1998	1	✓	✓	
Unity Twp.	PA	Citizens Cable		1997				
Daleville	AL	City Cablevision	4,653	1994				
Bridgeport	CT	City of Bridgeport	139,529					
Galesburg	IL	City of Galesburg						
Lebanon	ОН	City of Lebanon	16,962	1999	√	√	✓	
Negaunee	MI	City of Negaunee	4,576	1985				
Clear Lake	IA	CL Tel	8,161	2002		√	✓	
Lake County	FL	Clear Link	210,528	2001		√		
Bellmead	TX	ClearSource (Grande)	,					
Lacy-Lakeview	TX	ClearSource (Grande)						
Monroe	LA	CMA Cablevision	53,107	1985	i ✓	✓		
Coldwater	MI	Coldwater BPU	12,697	1998	}	√	√	
Columbus Grove	ОН	Columbus Grove Tel.	,	1997		✓	√	
Dothan	AL	Comcast	57,737	1981		√		
Monroe	MI	Comcast	22,076	1995		√		
Parkersburg	WV	Community Antenna	33,099	1998		√		
Ashtabula	VA	Conneaut Tel.	20,962	2001		√	√	
Painesville	OH	Conneaut Tel.	17,503	2001		✓	✓	
Big Lake	MN	Connections	6,063	2001		✓	✓	
Barrington	RI	Cox	16,819	2002		√	√	
Bristol	RI	Cox	22,469	2002		✓	✓	
Central	FL	Cox	22, .00	2001		√	✓	

					Not Orginial	Offers High- Speed	Offers Bundled Services (Voice,	New Firm that purchased assets for small fraction
CITY	ST	CHALLENGER	Population	0	Owner	Internet	Video, Data	of orginal costs
Central	FL	Cox		2003		✓	✓	
Claremore	OK	Cox	15,873			✓	✓	
Spotsylvania	VA	Cox		1991		✓		
Warren	RI	Cox	11,360			✓	✓	
Arma	KS	Craw-Kan Tel. Coop	1,529			✓	✓	
Franklin	KS	Craw-Kan Tel. Coop		2002		✓	✓	
State College	PA	D&E Comm.		1997	✓	✓	✓	
Britton	MI	D&P Cable	699	2002		✓	✓	
Morenci	ОН	D&P Cable	2,398	1998		✓		
Darien	GA	Darien Cable	1,719	2003		✓		
Middleburg	NJ	DeCom						
Charlotte	NC	DeCom Corp	540,828					
Blissfield	MI	Deerfield Farmers Tel	3,223	1996		✓	✓	
Delhi	NY	Delhi Tel.	2,583	2001		✓	✓	
Indianapolis	IN	Digital Access	781,870					
Kansas City	MO	Digital Access	441,545					
Milwaukee	WI	Digital Access	596,974					
Nashville	TN	Digital Access	1,270,520					
Austin	TX	Digital Union	656,562					
Chippewa Twp.	ОН	Doylestown Comm.		1997		✓	✓	
Doylestown Village	ОН	Doylestown Comm.	2,799	1997		✓	✓	
Elberton	GA	Elberton Utilities	4,743	2001		✓		
Willmar	MN	En-Tel	18,351	2000		✓	✓	
Eden Prairie	MN	Everest						
Edina	MN	Everest						
Hopkins	MN	Everest						
Minnetonka	MN	Everest						
Lenexa	KS	Everest Connections	40,238	2001		√	✓	
Mission	KS	Everest Connections	9,727	2001				
Mission	KS	Everest Connections	,			✓	√	
St. Charles County	МО	Everest Connections						
O'Fallon	MO	Everest/WideOpenWest						
Fairburn	GA	Fairburn Utilities	5,464	1997		✓		

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					Not Orginial	Offers High-	Offers Bundled Services (Voice,	New Firm that purchased assets for small fraction
CITY	ST	CHALLENGER	Population	Began		Internet	Video, Data)	of orginal costs
Bridgeport	СТ	FiberVision	139,529					
Hartford	CT	FiberVision	121,578					
New Haven	CT	FiberVision	123,626					
Elk Grove	CA	Frontier	59,984	2004	1	✓	✓	
Laurens	IA	Future Net	1,476	1998	3	✓	✓	
Blackwell	OK	Get LLC	7,688	1998	3			
Dothan	AL	Graceba	57,737	1999	9	✓	✓	
Dothan	AL	Graceba	57,737	2000)	✓	✓	
Alamo Heights	TX	Grande Comm.	7,319	2000)	✓	✓	
Austin	TX	Grande Comm.	656,562	2003	3	✓	✓	
Balcones Heights	TX	Grande Comm.	3,016	2000)	✓	✓	
Castle Hilles	TX	Grande Comm.	4,202	2000)	✓	✓	
Cibolo	TX	Grande Comm.	3,035	2000)	✓	✓	
Corpus Christi	TX	Grande Comm.	277,454	2000) ✓	✓	✓	
Houston	TX	Grande Comm.	1,953,631	new				
Kirby	TX	Grande Comm.	8,673	2000)	✓	✓	
Leon Valley	TX	Grande Comm.	9,239	2000)	✓	✓	
Live Oak	TX	Grande Comm.	9,156	2000)	✓	✓	
Midland	TX	Grande Comm.	94,996	2000) ✓	✓	✓	
Odessa	TX	Grande Comm.	90,943	2000) ✓	✓	✓	
Olmos Park	TX	Grande Comm.	2,343	2000)	✓	✓	
San Antonio	TX	Grande Comm.	1,144,646	2000)	✓	✓	
San Marcos	TX	Grande Comm.	34,733	2003	3	✓	✓	
Schetz	TX	Grande Comm.	18,694	2000)	✓	✓	
Selma	TX	Grande Comm.	788	2000)	✓	✓	
Terrell Hills	TX	Grande Comm.	5,019	2000)	✓	✓	
Waco	TX	Grande Comm.	113,726	1999)	✓	✓	
Windcrest	TX	Grande Comm.	5,105	2000)	✓	✓	
Greenville	TX	Greenville Elec. Util.	23,960	1999	9	✓		
Grundy Center	IA	Grundy Center Munic.	2,596			✓		
Savannah	GA	Hargray Comm.	33,862	2001		√		
Harlan	IA	Harlan Municipal Util.	5,282	1996	6	✓	✓	
Hartwell	GA	Hart Cable	4,188	2002	2			

OLTV	0.7	OUALI ENOED	Develotion		Not Orginial	Offers High- Speed	Offers Bundled Services (Voice,	New Firm that purchased assets for small fraction
CITY	ST	CHALLENGER		Began	Owner	Internet	+	of orginal costs
Winona	MN	Hiawatha Broadband	27,069			√	√	
Hawarden	IA	HiTec Municipal	2,478	1997		√	√	
Mason County	WA	Hood Canal Cable	49,905	1993		√	√	
Shelton	WA	Hood Canal Cable	8,422	1993		√	✓	
Chillicothe	ОН	Horizon Telecom	21,796	2000		✓	✓	
Conway	SC	Horry Tel. Coop	11,788	1999		✓	✓	
Georgetown	SC	Horry Tel. Coop	8,950	2001				
Horry County	SC	Horry Tel. Coop	196,629	1980		✓	✓	
N. Myrtle Beach	SC	Horry Tel. Coop	10,974	2001		✓	✓	
Cecil	PA	HTC Comm.	9,756	1996				
Houston	PA	HTC Comm.	1,314	1996				
Mt. Pleasant	PA	HTC Comm.	4,728	1996				
Independence	IA	Indep. Light & Power	6,014	2000		✓		
Kenmore	NY	Intertech Private Cable						
Kenton-Boone City	KY	Kenton Boone City						
Augusta	GA	Knology	195,182	1998		✓	√	
Charleston	SC	Knology	173,890	2000		✓	✓	
Huntsville	AL	Knology	158,216	1993	✓	✓	√	
Knoxville	TN	Knology	173890	2000		√	√	
Louisville	KY	Knology	96,650	1998				
Nashville (Mid. TN)	TN	Knology	704,431					
Panama City	FL	Knology	36,417	1993	√	√	√	
Summerville/Dorches.	SC	Knology	27,752	2000		√	√	
Durand	MI	Lennon Tel. Co.	3,933	1998				
Lexington	NC	LexCom	-,					
Davidson County	NC	Lexicom Cable Ser.	147,246	1997		√	√	
Fallsburg	KY	Lycom	2,018					
Little Rock	AR	Lyncstar	183,133					
Sauk Centre	MN	Mainstreet Comm.	3,930	1999		✓	✓	
Milledgeville	GA	Mallard Cablevision	18,575	1996				
Naples	FL	Marco Island Cable	14,879	1990		√		
Cedar Rapids	IA	McLeod	120,573	1998			/	
Memphis	TN	Memphis Networx	120,575	1000		•	,	
Inculbuig	111	MICHIPHIO MELWOIX					1	

				Not Orginial	Offers High- Speed	Offers Bundled Services (Voice,	New Firm that purchased assets for small fraction
CITY ST	CHALLENGER	Population	Began	Owner	Internet	Video, Data)	of orginal costs
Shelby County TN	Memphis Networx						
Albany	Midtel Cable TV	1,398					
Anne Arundel Cnty MD	Millennium	489,656			✓		
Social Circle GA	Monroe Utilities	3,379	1996	6	✓		
Walton County GA	Monroe Utilities	11,407	1979)	✓		
Morristown NJ	Morristown Util. System	18,544					
Dodgeville WI	Mount Horeb Telecom	4,220	2002	2	✓	✓	
Murray KY	Murray Electric	2,400	2001		✓	✓	
Minster OH	New Knoxville Tel.	2,794	1995	5	✓		
Moulton OH	New Knoxville Tel.		2001		√	✓	
Bakersfield CA	Newhouse	247,057		✓	✓		
Coweta County GA	Newman Utilities	89,215	1996	3	✓	✓	
Tyrone GA	Newman Utilities	3,196	2001		✓	√	
Iron Mountian MI	Northside Cable TV	8,154	2000)	√		
Norwood MA	Norwood Elec. Light	28,578	2002	2	✓		
New Ulm MN	NuTel	13,594	2001		√	√	
Ft. Worth TX	One Source	13,594	1997		√	√	
Osage IA	Osage Municipal Util.	3,451	2002	2	√	√	
Livingston TN	Overton County Cable	3,498	1986	3			
Auburn ME	Oxford Networks	23,203	2004		√	√	
Lewiston ME	Oxford Networks	35,690			√	✓	
Bemidji MN	Paul Bunyan Tel	11,917	2000		√	√	
Lower Burrell PA	PCOM Comm.	12,608					
Pembroke WV	Pembroke Tel	,,,,,,	1991				
Houston TX	Phonoscope	1,953,631	1986		√	✓	
Colman SD	Prairie Wave	1,000,001	2001		√	✓	
Flandreau SD	Prairie Wave	2,376	2001		√	✓	
Gayville SD	Prairie Wave	_,=,=:=	2001		√	✓	
Luverne MN	Prairie Wave	4,617	2000		✓	✓	
Marshall MN	Prairie Wave	12,735	1999		✓ ·	✓	
Pipestone MN	Prairie Wave	4,280	1999		✓ ×	√	
Slayton MN	Prairie Wave	2,072	2000		✓ ·	√	
Storm Lake IA	Prairie Wave	10,076			✓ ·	✓	

						Offers High-	Offers Bundled Services	New Firm that purchased assets for
				_	Not Orginial	Speed	(Voice,	small fraction
CITY	ST	CHALLENGER)	Owner	Internet		of orginal costs
Tracy	MN	Prairie Wave	2,268	1999		√	√	
Worthington	IA	Prairie Wave		2000		✓	√	
Yankton	SD	Prairie Wave	13,528	2000		✓	√	
Albany	NY	Princetown Cable	61,821	1990		✓		
Rupert	ID	Project Mutual Tel Coop	5,645	1995		✓	✓	
Provo	UT	Provo Cable/Provo	105,166	1993	✓	✓		
Poteau	OK	Quality Entertainment	7,939					
Boulder	CO	Qwest	94,673	1999		✓	✓	
Chandler	AZ	Qwest	176,581	1999		✓	✓	
Douglas County	CO	Qwest	175,776	1999		✓	✓	
Gilbert	AZ	Qwest	109,697	1999		✓	✓	
Glendale	AZ	Qwest	218,812	1999		✓	✓	
Maricopa County	AZ	Qwest	3,072,149	1999		✓	✓	
Omaha	NE	Qwest	390,007	1995		✓	✓	
Paradise Valley	AZ	Qwest	13,664	1999		✓	✓	
Peoria	AZ	Qwest	108,364	1999		✓	✓	
Phoenix	AZ	Qwest	1,321,043	1999		✓	✓	
Scottsdale	AZ	Qwest	202,705	1999		✓	✓	
Eatonville	WA	Ranier Group	2,012	1995		✓	✓	
Pierce County	WA	Ranier Group	700,820	1995		✓	✓	
Arlington	MA	RCN	42,389	1997		✓	✓	
Bayonne	NJ	RCN	61,842					
Beverly Hills	CA	RCN	33,784					
Boston	MA	RCN	589,141	1997		✓	✓	
Brookline	MA	RCN	57,107	1997		✓	✓	
Burlingame	CA	RCN	28,158	2000		✓	✓	
Burlington	MA	RCN	22,876	1997		✓	✓	
Carson	CA	RCN	89,730	2001		✓	✓	
Chicago	IL	RCN	2,896,016	1999	√	✓	√	
Daly City	CA	RCN	103,621	1999		√	√	
Dedham	MA	RCN	23,464	1997		√	√	
Delaware County	PA	RCN	550,864	2000		√	√	
Framingham	MA	RCN	66,910	1997		✓	√	

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					Not Orginial	Offers High- Speed	Offers Bundled Services (Voice,	New Firm that purchased assets for small fraction
CITY	ST	CHALLENGER		Began		Internet	Video, Data)	of orginal costs
Gardena	CA	RCN	57,746		1	✓	✓	
Hermosa Beach	CA	RCN	18,566					
Hoboken	NJ	RCN	38,577					
Lexington	MA	RCN	30,355			✓	✓	
Marlborough	MA	RCN	36,255					
Milton	MA	RCN	26,062					
Natick	MA	RCN	32,170			✓	✓	
Needham	MA	RCN	28,911	199	7	✓	✓	
New York	NY	RCN	8,008,278	1999	9 🗸	✓	✓	
Newton	MA	RCN	83,829	1997	7	✓	✓	
Quincy	MA	RCN	88,025	1999	9			
Randolph	MA	RCN	30,963	2000)			
Redwood City	CA	RCN	75,402	2003	3	✓	✓	
S. San Francisco	CA	RCN	776,733	1999	9	✓	✓	
San Carlos	CA	RCN	27,718	2000)			
San Mateo	CA	RCN	92,482	200	1	✓	✓	
Saugus	MA	RCN	26,078	200	1			
Somerville	MA	RCN	77,478	199	7	✓	✓	
Stoneham	MA	RCN	22,219)	√	✓	
Stoneham	MA	RCN	22,219	199				
Wakefield	MA	RCN	24,804	199	7	✓	√	
Waltham	MA	RCN	59,226			√	√	
Watertown	MA	RCN	32,986		7	√	√	
Weymouth	MA	RCN	53,988					
Winchester	MA	RCN	20,810					
Woburn	MA	RCN	37,258			√	✓	
Falls Church	VA	RCN Starpower	10,377	1999		√		
Fredricksburg	VA	RCN Starpower	19,279			✓		
Reinbeck	IA	Reinbeck Tel. & Util.	,			✓	✓	
St. John the Baptist	LA	Reserve Telecom	43,044	2000	0	✓	✓	
Archbold	OH	Ridgeville Tel	4,290			√		
Colby	KS	S&T Comm.	5,450					
Cave City	KY	S.Central Rural Tel.	1,880			✓	✓	

							Offers	New Firm that
							Bundled	purchased
						Offers High-	Services	assets for
				_	Not Orginial	Speed	(Voice,	small fraction
CITY	ST	CHALLENGER	•)	Owner	Internet		of orginal costs
Hiseville	KY	S.Central Rural Tel.	222	2002		✓	✓	
Horse Cave	KY	S.Central Rural Tel.	2,252	2002		✓	✓	
Concord	CA	Seren Innovations	121,780	2001		✓	✓	
St. Cloud	MN	Seren Innovations	59,107	1998		✓	✓	
Walnut Creek	CA	Seren Innovations	64,296	2002		✓	✓	
Plaquemine	LA	Service One	7,064	1993				
Newburgh	IN	Sigecom	3,088	2000		✓	✓	
Spanish Fork	UT	Spanish Fork Com. Net	20,246	2001		✓		
Spencer	IA	Spencer Munic. Util.	11,317	2000		✓		
Arlington	VA	Starpower	189,453	2000				
Montgomery Cnty	MD	Starpower	873,341	1999		✓	✓	
Prince George's Cnty	MD	Starpower	801,515			✓	✓	
Washington	DC	Starpower	572,059	2000		√	✓	
Sacramento	CA	Strategic Technologies	407,018	1996		✓		
Houston County	GA	SunTel	110,765		✓	✓	✓	✓
Sacramento	CA	Sure West	407,018	2003	✓	✓	✓	✓
Pierce County	WA	Tacoma Power	7,000,820	1998		✓		
St. Marys	ОН	Telephone Service Co.	8,324	2003		✓	✓	
Wapakoneta	ОН	Telephone Service Co.	9,474	1999		✓	✓	
Dothan	AL	Time Warner	57,737		✓	✓		
Louisville	KY	TotalLink (Utilicom/Vectren)	·					
Houston	TX	TV Max	1,953,631	1989	√			
Cincinnati (N. Ohio)	ОН	TWC	331,285	1999				
Citrus County	FL	TWC	118,085					
Leander	TX	TWC	7,596			√		
Mount Airy	NC	TWC	8,484	1996				
Orlando	FL	TWC	185,951					
Pflugerville	TX	TWC	16,335			√		
Poway	CA	TWC	48,044	1961		✓		
San Diego	CA	TWC	1,223,400	1961		✓		
Tampa	FL	TWC	303,447	.001				
Chula Vista	CA	Ultronics	173,556	1987		√		
National City	CA	Ultronics	54,260	1987		<i>✓</i>		

CITY	ST	CHALLENGER	Population	Began	Not Orginial Owner	Offers High- Speed Internet	Offers Bundled Services (Voice,	New Firm that purchased assets for small fraction of orginal costs
Cobb County	GA	United Telesystems	607,751	2001		/ / /	Video, Data	or orginal costs
Park Rapids	MN	United Telesystems United (W.Central Tel.)	3,276			√	√	
Salem	IL	US Sonet	7,909			→	√	
Centerville	GA	Watson Cable	4,278		,	· ·	•	
Lake Wildwood	GA	Watson Cable	4,210	1991		V ✓		
Macon	GA	Watson Cable	97,255			√		
Warner Robins	GA	Watson Cable	48,804			√		
Berea	OH	WideOpenWest	18,970		3 ✓	√		✓
Berkley	MI	WideOpenWest	15,531	2001		∨		∨ ✓
,	OH					√		∨ ✓
Bexley		WideOpenWest	13,203	1996) v	V		V
Brentwood	MO	WideOpenWest	04.040	4000				/
Brook Park	OH	WideOpenWest	21,218			√		√
Brooklyn	OH	WideOpenWest	11,586			√		√
Canton	MI	WideOpenWest	76,366			√	√	√
Centerline	MI	WideOpenWest	8,531	2001		√		✓
Chicago	IL	WideOpenWest	2,896,016			✓		✓
Chicago Heights	IL	WideOpenWest	32,776			✓		✓
Clawson	MI	WideOpenWest	12,732	2001		✓		✓
Clinton	MI	WideOpenWest	95,648			✓		✓
Clinton Twp	ОН	WideOpenWest	1,337	1996	S ✓	✓		✓
Colorado Springs	CO	WideOpenWest						
Columbus	ОН	WideOpenWest	711,470			✓		✓
Crestwood	IL	WideOpenWest	11,251	1998	3 ✓	✓		✓
Creve Coeur	MO	WideOpenWest						
Des Plaines	IL	WideOpenWest	58720	1998	3	✓		✓
Dublin	ОН	WideOpenWest	31,392	1996	6 ✓	✓		✓
Eastpointe	MI	WideOpenWest	34,077	2001	✓	✓		✓
Elgin	IL	WideOpenWest	94,487	1998	3 🗸	✓		✓
Fairview Park	ОН	WideOpenWest	17,572	1997	' ✓	✓		✓
Ferndale	MI	WideOpenWest	22,105	2001		√		✓
Fraser	MI	WideOpenWest	15,297	2001	✓	√		✓
Gahanna	ОН	WideOpenWest	32,636	1996	6 ✓	√		✓
Garfield Heights	ОН	WideOpenWest	30,734			✓		✓

	T		1			1	
						Offers Bundled	New Firm that purchased
							assets for
				_		,	small fraction
ST		•				Video, Data)	of orginal costs
IL	•						✓
	•	1					✓
_	•	,			· ·		✓
IN					✓		✓
MI	•				✓		✓
IL	•	1			✓		✓
ОН	WideOpenWest	24,230	1996	6 ✓	✓		✓
ОН	WideOpenWest	6,184	1996	6 ✓	✓		✓
MO	WideOpenWest						
MN	WideOpenWest						
MI	WideOpenWest	50,478		✓			✓
MI	WideOpenWest	31,101	2001	✓	✓		✓
MO	WideOpenWest						
ОН	WideOpenWest	26,156	1999)	✓		✓
MO	WideOpenWest						
ОН		646	1996	§ ✓	✓		✓
ОН	WideOpenWest	15,542	1997	,	✓		✓
ОН	WideOpenWest	705	1996	§ ✓	✓		✓
ОН		1,288	1996	S 🗸	√		✓
MI	•			✓	✓		✓
IL	•	· ·		3 🗸	√		✓
IL				3 🗸	√		✓
ОН				S 🗸	√		✓
ОН		34,113			✓		✓
ОН	•	,		' \	√		√
MI					√	√	√
					√		√
		1			✓		√
	•				✓		√
					✓		√
					✓	√	√
		,			✓		✓
					✓	√	√
	IL OH IN MI IL OH MO MN MI MI MO OH	IL WideOpenWest IL WideOpenWest IN WideOpenWest IN WideOpenWest IIL WideOpenWest IIL WideOpenWest OH WideOpenWest OH WideOpenWest MO WideOpenWest MN WideOpenWest MI WideOpenWest MI WideOpenWest MI WideOpenWest MI WideOpenWest OH WideOpenWest IL WideOpenWest OH WideOpenWest IL WideOpenWest OH WideOpenWest IL WideOpenWest	IL WideOpenWest 2,699 IL WideOpenWest 41,847 OH WideOpenWest 6,695 IN WideOpenWest 83,048 MI WideOpenWest 24,461 IL WideOpenWest 30,000 OH WideOpenWest 24,230 OH WideOpenWest 6,184 MO WideOpenWest MI WideOpenWest MI WideOpenWest 31,101 MO WideOpenWest 31,101 MO WideOpenWest 26,156 MO WideOpenWest 646 OH WideOpenWest 15,542 OH WideOpenWest 17,312 IL WideOpenWest 17,312 IL WideOpenWest 128,358 OH WideOpenWest 128,358 OH WideOpenWest 34,113 OH WideOpenWest 34,113 OH WideOpenWest 28,648 MI WideOpenWest 34,977 IL WideOpenWest 3,977 IL WideOpenWest 3,977 IL WideOpenWest 4,689 OH WideOpenWest 4,689 OH	IL WideOpenWest 2,699 1998 IL WideOpenWest 41,847 1998 OH WideOpenWest 6,695 1996 IN WideOpenWest 83,048 1998 MI WideOpenWest 24,461 2001 IL WideOpenWest 30,000 1998 OH WideOpenWest 6,184 1996 MO WideOpenWest 6,184 1996 MO WideOpenWest 50,478 MI WideOpenWest 31,101 2001 MO WideOpenWest 26,156 1998 MO WideOpenWest 646 1996 OH WideOpenWest 705 1996 OH WideOpenWest 15,542 1997 OH WideOpenWest 1,288 1996 OH WideOpenWest 17,312 2001 IL WideOpenWest 128,358 1998 OH WideOpenWest 34,113 1996 <t< td=""><td> IL WideOpenWest 2,699 1998 V IL WideOpenWest 41,847 1998 V OH WideOpenWest 6,695 1996 V IN WideOpenWest 83,048 1998 V MI WideOpenWest 24,461 2001 V IL WideOpenWest 30,000 1998 V OH WideOpenWest 24,230 1996 V OH WideOpenWest 6,184 1996 V MO WideOpenWest 50,478 V MI WideOpenWest 31,101 2001 V MO WideOpenWest 26,156 1999 MO WideOpenWest 26,156 1999 MO WideOpenWest 50,478 V MI WideOpenWest 26,156 1999 MO WideOpenWest 26,156 1999 MO WideOpenWest 15,542 1997 OH WideOpenWest 705 1996 V OH WideOpenWest 1,288 1996 V OH WideOpenWest 17,312 2001 V IL WideOpenWest 17,312 2001 V IL WideOpenWest 128,358 1998 V OH WideOpenWest 34,113 1996 V OH WideOpenWest 28,648 1997 V MI WideOpenWest 3,977 1996 V IL WideOpenWest 3,977 1996 V IL WideOpenWest 51,077 1998 V IL WideOpenWest 4,689 1998 V IL WideOpenWest 4,689 1998 V IL WideOpenWest 4,689 1998 V OH WideOpenWest 4,689 1998 V OH</td><td> ST CHALLENGER</td><td> ST CHALLENGER</td></t<>	IL WideOpenWest 2,699 1998 V IL WideOpenWest 41,847 1998 V OH WideOpenWest 6,695 1996 V IN WideOpenWest 83,048 1998 V MI WideOpenWest 24,461 2001 V IL WideOpenWest 30,000 1998 V OH WideOpenWest 24,230 1996 V OH WideOpenWest 6,184 1996 V MO WideOpenWest 50,478 V MI WideOpenWest 31,101 2001 V MO WideOpenWest 26,156 1999 MO WideOpenWest 26,156 1999 MO WideOpenWest 50,478 V MI WideOpenWest 26,156 1999 MO WideOpenWest 26,156 1999 MO WideOpenWest 15,542 1997 OH WideOpenWest 705 1996 V OH WideOpenWest 1,288 1996 V OH WideOpenWest 17,312 2001 V IL WideOpenWest 17,312 2001 V IL WideOpenWest 128,358 1998 V OH WideOpenWest 34,113 1996 V OH WideOpenWest 28,648 1997 V MI WideOpenWest 3,977 1996 V IL WideOpenWest 3,977 1996 V IL WideOpenWest 51,077 1998 V IL WideOpenWest 4,689 1998 V IL WideOpenWest 4,689 1998 V IL WideOpenWest 4,689 1998 V OH WideOpenWest 4,689 1998 V OH	ST CHALLENGER	ST CHALLENGER

		T						
							Offers	New Firm that
							Bundled	purchased
						Offers High-	Services	assets for
					Not Orginial	Speed	(Voice,	small fraction
CITY	ST	CHALLENGER	Population	Began	Owner	Internet	, ,	of orginal costs
	IL	WideOpenWest	17,081	1998		memet √	video, Data)	or orginal costs
	OH	WideOpenWest	499			√		√
Robbins	IL	WideOpenWest	6,635			V ✓		√
	MI	WideOpenWest	10,467	2001		∨ ✓		√
			,			∨		∨ ✓
	MI	WideOpenWest	68,825			∨ ✓		√
	MI	WideOpenWest	60,062			·		√
Schaumburg	IL O	WideOpenWest	75,386			√		·
<u> </u>	OH	WideOpenWest	29,405			√		√
	OH	WideOpenWest	00.44=	1996		√		√
	IL	WideOpenWest	22,147	1998	3 🗸	✓		✓
	МО	WideOpenWest						
	MI	WideOpenWest	63,096	2001	✓	✓		✓
	MO	WideOpenWest						
	MO	WideOpenWest						
	MI	WideOpenWest	124,471	2001		✓		✓
J	IL	WideOpenWest	36,407	1998		✓		✓
J	ОН	WideOpenWest	43,858			✓		✓
	MI	WideOpenWest	80,959	2001	✓	✓		✓
, ,	MO	WideOpenWest						
Upper Arlington	OH	WideOpenWest	33,686			✓		✓
Utica	MI	WideOpenWest	4,577	2001		✓		✓
	OH	WideOpenWest	2,179			✓		✓
Vernon Hills	IL	WideOpenWest	20,120			✓		✓
Warren	MI	WideOpenWest	138,247	2001	✓	✓		✓
Westlake	ОН	WideOpenWest	31,719	1997	′ ✓	✓		✓
Wheeling	IL	WideOpenWest	34,496	1998	3	✓		✓
Worthington	ОН	WideOpenWest	14,125	1996	§ ✓	✓		✓
Minneapolis	MN	WideOpenWest/Everest						
Richfield	MN	WideOpenWest/Everest						
Austin	TX	WIN	656,562					
Houston	TX	WIN	1,953,631					
Phoenix	ΑZ	WIN	1,321,045					
	CA	WIN	1,223,400					

					Not Orginial	Offers High- Speed	Bundled Services (Voice,	New Firm that purchased assets for small fraction
CITY	ST	CHALLENGER	Population	Began	Owner	Internet	Video, Data)	of orginal costs
San Francisco	CA	WIN	776,733					
Las Vegas	NV	WIN	478,434					
Seattle	WA	WIN/RCN	563,374					
Texline	TX	XIT Comm.	7,237	2001				

CITY	ST	CHALLENGER	Failed Overbuild	Failing Overbuild	Overbuilds which have yet to be built	Overbuild targeted non-rebuilt communities	Overbuild is affiliated with a Utility	Overbuilder is owned by Coop
20 cities		ABI	✓					
La Crescent	MN A	ACE Comm.						✓
Camarillo	CA A	Adelphia				✓		
Encinitas	CA A	Adelphia				✓		
Malibu	CA A	Adelphia				✓		
Oxnard	CA A	Adelphia						
Port Hueneme	CA A	Adelphia						
San Marcos	CA A	Adelphia				✓		
Ventura		Adelphia						
Flora	IL A	Advance Technologies						
Alameda		Alameda Power				✓		
Algona	IA A	Algona Municipal Util.						
Evanston		All West Comm.				✓		
Alta	IA A	Altatec						
Arcadia	CA A	Altrio		✓		✓		
Monrovia	CA A	Altrio		✓		✓		
San Gabriel Valley	CA A	Altrio		✓				
Sierra Madre	CA A	Altrio		✓		✓		
Ann Arbor	MI A	American Broadband			✓			
E. Lansing	MI A	American Broadband			✓			
Lansing	MI A	American Broadband			✓			
St. Joseph Twp.	MN A	Astound Broadband						
Pultney	OH E	Bellaire Cable TV						
Bartlett	TN E	BellSouth	√					
South Dade County	FL E	BellSouth				✓		
Winder	GA E	BellSouth				✓		
Cherokee County	GA E	BellSouth Entertainment						
Cobb County	GA E	BellSouth Entertainment						
Duluth	GA E	BellSouth Entertainment						
Gwinnett County	GA E	BellSouth Entertainment						
Roswell	GA E	BellSouth Entertainment						
Woodstock	GA E	BellSouth Entertainment						
Chamblee	GA E	BellSouth Interactive						

CITY	ST CHALLENGER	Failed Overbuild	Failing Overbuild	Overbuilds which have yet to be built	Overbuild targeted non-rebuilt communities	Overbuild is affiliated with a Utility	Overbuilder is owned by Co-
DeKalb	GA BellSouth Interactive	Overbuild	Overbuild	to be built	Communities	Othity	ОР
St. John's County	FL BellSouth Interactive						
Fallowfield	PA Bentleyville Cable						
Albany	NY Berkshire Tel						
	SD Black Hills GLA					√	
Rapid City	WA Black Rock Cable			✓		V	
Skagit County				· ·			
Snohomish County	WA Black Rock Cable			✓ ✓			
Whatcom County	WA Black Rock Cable			V			
Braintree	MA Braintree Elec. Light				✓		
Elizabethtown/Hardi	KY Brandenburg Telecom						
Ocala	FL BrightHouse						
Abington	VA Bristol Virginia Utilities						
Glade Spring	VA Bristol Virginia Utilities						
Horton Twp.	PA Brockway TV				√		
Kane	PA Brockway TV				✓		
Bryan	OH Bryan Municipal Cable				✓		
Waterville	OH Buckeye Cable				✓		
Maryland Hts	MO Cable America						
Mesa	AZ Cable America						
Sacramento	CA Cable America						
Cameron	LA Cameron Tel.						
Hackberry	LA Cameron Tel.						
Charlotte	NC Carolina Broadband	✓					
Columbia	SC Carolina Broadband	✓					
Durham	NC Carolina Broadband	✓					
Greensboro	NC Carolina Broadband	✓					
Greenville	SC Carolina Broadband	✓					
Raleigh	NC Carolina Broadband	✓					
Spartanburg	SC Carolina Broadband	✓					
Winston Salem	NC Carolina Broadband	√					
Cedar Falls	IA Cedar Falls Utilities						
Clearview	WV Centre TV						
Ohio County	WV Centre TV						

CITY	ST CHALLENGER	Failed Overbuild	Failing Overbuild	Overbuilds targe which have yet rebu	build eted non- ilt nunities	Overbuild is affiliated with a Utility	Overbuilder is owned by Coop
Warwood	WV Centre TV	Overbuild	Overbuild	to be built com	Hulliles	Othity	ОР
Urbana	OH Champaign County Tel						
Denver	CO Champion Broadband				√		
Lakewood	CO Champion Broadband				√		
Kanawha County	WV Charter				V		
Terre Haute	IN Charter						
Danville	VA Chatmoss Tel.				√		
					V		✓
Hayward	MN Chequamegon Coop						
Barron	WI Chibardun Coop						√
Camron	WI Chibardun Coop						√
Chetek	WI Chibardun Coop						✓
Unity Twp.	PA Citizens Cable				✓		
Daleville	AL City Cablevision						
Bridgeport	CT City of Bridgeport	✓					
Galesburg	IL City of Galesburg	✓					
Lebanon	OH City of Lebanon						
Negaunee	MI City of Negaunee						
Clear Lake	IA CL Tel						
Lake County	FL Clear Link						
Bellmead	TX ClearSource (Grande)	✓					
Lacy-Lakeview	TX ClearSource (Grande)	✓					
Monroe	LA CMA Cablevision						
Coldwater	MI Coldwater BPU						
Columbus Grove	OH Columbus Grove Tel.						
Dothan	AL Comcast						
Monroe	MI Comcast						
Parkersburg	WV Community Antenna				✓		
Ashtabula	VA Conneaut Tel.				✓		
Painesville	OH Conneaut Tel.				✓		
Big Lake	MN Connections						
Barrington	RI Cox						
Bristol	RI Cox						
Central	FL Cox						

					Overbuilds	Overbuild targeted non-		Overbuilder is
CITY	СТ	CHALLENGED	Failed Overbuild	Failing	which have yet		with a	owned by Co-
CITY	ST FL	CHALLENGER Cox	Overbuild	Overbuild	to be built	communities	Utility	ор
Central Claremore	OK	Cox				✓		
	VA	Cox				√		
Spotsylvania		Cox				V		
Warren Arma	RI							✓
-	KS	Craw-Kan Tel. Coop						√
Franklin	KS	Craw-Kan Tel. Coop						V
State College	PA	D&E Comm.				√		
Britton	MI	D&P Cable				✓		
Morenci	OH	D&P Cable				✓		
Darien	GA	Darien Cable						
Middleburg	NJ	DeCom	✓					
Charlotte	NC	DeCom Corp	✓					
Blissfield	MI	Deerfield Farmers Tel						
Delhi	NY	Delhi Tel.						
Indianapolis	IN	Digital Access	✓					
Kansas City	MO	Digital Access	✓					
Milwaukee	WI	Digital Access	✓					
Nashville	TN	Digital Access	✓					
Austin	TX	Digital Union	✓					
Chippewa Twp.	ОН	Doylestown Comm.						
Doylestown Village	ОН	Doylestown Comm.						
Elberton	GA	Elberton Utilities						
Willmar	MN	En-Tel					✓	
Eden Prairie	MN	Everest	✓					
Edina	MN	Everest	√					
Hopkins	MN	Everest	✓					
Minnetonka	MN	Everest	√					
Lenexa	KS	Everest Connections					√	
Mission	KS	Everest Connections		✓				
Mission	KS	Everest Connections					√	
St. Charles County	MO	Everest Connections	✓					
O'Fallon	MO	Everest/WideOpenWest	✓					
Fairburn	GA	Fairburn Utilities						

CITY	ST CHALLENGER	Failed Overbuild	Failing Overbuild	Overbuilds which have yet to be built	Overbuild targeted non-rebuilt communities	Overbuild is affiliated with a Utility	Overbuilder is owned by Co-
			Overbuild	to be built	communities	Othlity	ор
Bridgeport	CT FiberVision	✓ ✓					
Hartford	CT FiberVision						
New Haven	CT FiberVision	√					
Elk Grove	CA Frontier						
Laurens	IA Future Net						
Blackwell	OK Get LLC						
Dothan	AL Graceba						
Dothan	AL Graceba						
Alamo Heights	TX Grande Comm.						
Austin	TX Grande Comm.						
Balcones Heights	TX Grande Comm.						
Castle Hilles	TX Grande Comm.						
Cibolo	TX Grande Comm.						
Corpus Christi	TX Grande Comm.				✓		
Houston	TX Grande Comm.			✓			
Kirby	TX Grande Comm.						
Leon Valley	TX Grande Comm.						
Live Oak	TX Grande Comm.						
Midland	TX Grande Comm.						
Odessa	TX Grande Comm.						
Olmos Park	TX Grande Comm.						
San Antonio	TX Grande Comm.						
San Marcos	TX Grande Comm.						
Schetz	TX Grande Comm.						
Selma	TX Grande Comm.						
Terrell Hills	TX Grande Comm.						
Waco	TX Grande Comm.						
Windcrest	TX Grande Comm.						
Greenville	TX Greenville Elec. Util.				√		
Grundy Center	IA Grundy Center Munic.						
Savannah	GA Hargray Comm.						
Harlan	IA Harlan Municipal Util.						
Hartwell	GA Hart Cable						

	T 1					1	
		Failed	Failing	Overbuilds which have yet		with a	Overbuilder is owned by Co-
CITY	ST CHALLENGER	Overbuild	Overbuild	to be built	communities	Utility	ор
Winona	MN Hiawatha Broadband						
Hawarden	IA HiTec Municipal						
Mason County	WA Hood Canal Cable				✓		
Shelton	WA Hood Canal Cable				✓		
Chillicothe	OH Horizon Telecom				✓		
Conway	SC Horry Tel. Coop						
Georgetown	SC Horry Tel. Coop				✓		
Horry County	SC Horry Tel. Coop						
N. Myrtle Beach	SC Horry Tel. Coop						
Cecil	PA HTC Comm.						
Houston	PA HTC Comm.						
Mt. Pleasant	PA HTC Comm.						
Independence	IA Indep. Light & Power						
Kenmore	NY Intertech Private Cable	✓					
Kenton-Boone City	KY Kenton Boone City			✓			
Augusta	GA Knology						
Charleston	SC Knology						
Huntsville	AL Knology						
Knoxville	TN Knology						
Louisville	KY Knology			✓			
Nashville (Mid. TN)	TN Knology			✓			
Panama City	FL Knology						
Summerville/Dorches.	SC Knology						
Durand	MI Lennon Tel. Co.						
Lexington	NC LexCom	√					
Davidson County	NC Lexicom Cable Ser.						
Fallsburg	KY Lycom						
Little Rock	AR Lyncstar	√					
Sauk Centre	MN Mainstreet Comm.						
Milledgeville	GA Mallard Cablevision		√		√		
Naples	FL Marco Island Cable						
Cedar Rapids	IA McLeod						
Memphis	TN Memphis Networx	√					

Coweta County GA Newman Utilities ✓ <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>									
Shelby County TN Memphis Networx Albany NY Midlel Cable TV Anne Arundel Cnty MD Millennium Social Circle GA Monroe Utilities Watton County GA Monroe Utilities Morristown NJ Morristown Util. System Murray Murray KY Murray Electric Moulton OH New Knoxville Tel. Moulton OH New Knoxville Tel. Bakersfield CA Newnouse Coweta County GA Newman Utilities Y Tyrone GA Newman Utilities Iron Mountian MI Northside Cable TV Norwood MA Norwood Elec. Light New Ulm MN NuTel Ft. Worth TX One Source Osage IA Osage Municipal Util. Livingston TN Overton County Cable Alburn ME Oxford Networks Lewiston ME Coxford Networks Lewiston ME Coxford Networks Pembroke WUP Pembroke Tel Houston TX Phonoscope Colman SD Prairie Wave Marsel Wave Marsel Wave Marsel Wave Marsel Marsel MN Prairie Wave Marsel Wave MN Prairie Wave Marsel Wave Marsel Wave Marsel Marsel MN Prairie Wave Marsel Wave Marsel Wave Marsel Wave Marsel Wave Marsel MN Prairie Wave Marsel Wave Marsel Wave Marsel MN Prairie Wave Marsel MN Prairie Wave Marsel MN Prairie Wave Marsel MN Prairie Wave Marsel Marsel MN Prairie Wave Msayon MN Prairie Wave Msayon MN Prairie Wave		O.T.	OUALI ENOED		•	which have yet	targeted non- rebuilt	is affiliated with a	owned by Co-
Albany					Overbuild	to be built	communities	Utility	ор
Anne Árundel Cnty Social Circle GA Monroe Utilities Morristown UN Moulton OH New Knoxville Tel. A New Knoxville Tel. Bakersfield CA Newhouse Coweta County GA Newman Utilities A Norwood UN Norw				√					
Social Circle									
Walton County GA Monroe Utilities ✓ Morristown NJ Morristown Uil. System ✓ Dodgeville WI Mount horeb Telecom Murray KY Murray Electric ✓ Minster OH New Knoxville Tel. ✓ Moulton OH New Knoxville Tel. ✓ Bakersfield CA Newhouse ✓ Coweta County GA Newman Utilities ✓ Tyrone GA Newman Utilities ✓ Iron Mountian MI Northside Cable TV ✓ Norwood MA Norwood Elec. Light ✓ New Ulm MN NuTel NuTel Ft. Worth TX One Source ✓ Osage IA Osage Municipal Util. ✓ Livingston TN Overton County Cable ✓ Auburn ME Oxford Networks ✓ Bemidji MN Paul Bunyan Tel ✓ Lewiston									
Morristown NJ Morristown Util. System ✓ Dodgeville WI Mount Horeb Telecom ✓ Murray KY Murray Electric ✓ Minster OH New Knoxville Tel. ✓ Moulton OH New Knoxville Tel. ✓ Moulton OH New Knoxville Tel. ✓ Moulton OH New Knoxville Tel. ✓ Bakersfield CA Newhouse ✓ Coweta County GA Newman Utilities ✓ Iron Mountian MI Northiese ✓ Iron Mountian MI Northiese ✓ Norwood MA Norwood Elec. Light ✓ New Ulm MN NuTel ✓ Ft. Worth TX One Source ✓ Osage IA Osage Municipal Util. ✓ Leviston ME Oxford Networks ✓ Lewiston ME Oxford Networks ✓ Lewiston									
Dodgeville WI Mount Horeb Telecom Murray KY Murray Electric									
Murray KY Murray Electric ✓ Minster OH New Knoxville Tel. ✓ Moulton OH New Knoxville Tel. ✓ Bakersfield CA Newhouse ✓ Coweta County GA Newman Utilities ✓ Tyrone GA Newman Utilities ✓ Iron Mountian MI Northside Cable TV ✓ Norwood MA Norwood Elec. Light ✓ New Ulm MN NuTel ✓ Ft. Worth TX One Source ✓ Osage IA Osage Municipal Util. ✓ Livingston TN Overton County Cable ✓ Auburn ME Oxford Networks ✓ Bemidji MN Paul Bunyan Tel ✓ Lower Burrell PA PCOM Comm. ✓ Pembroke WV Pembroke Tel ✓ Houston TX Phonoscope Colman SD				✓				✓	
Minster OH New Knoxville Tel. ✓ Moulton OH New Knoxville Tel. Bakersfield CA Newhouse ✓ Coweta County GA Newman Utilities ✓ ✓ Tyrone GA Newman Utilities ✓ ✓ Iron Mountian MI Northside Cable TV ✓ ✓ Norwood MA Norwood Elec. Light ✓ ✓ New Ulm MN NuTel ✓ ✓ Ft. Worth TX One Source ✓ ✓ Osage IA Osage Municipal Util. ✓ ✓ Livingston TN Overton County Cable ✓ ✓ Auburn ME Oxford Networks ✓ ✓ Bemidji MN Paul Bunyan Tel ✓ ✓ Lower Burrell PA PCOM Comm. ✓ ✓ Pembroke WV Pembroke Tel ✓ ✓ Houston TX Phonoscope <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
Moulton OH New Knoxville Tel. Bakersfield CA Newhouse Coweta County GA Newman Utilities Tyrone GA Newman Utilities Iron Mountian MI Northside Cable TV Norwood MA Norwood Elec. Light New UIm MN NuTel Ft. Worth TX One Source Very V Osage IA Osage Municipal Util. Livingston TN Overton County Cable Auburn ME Oxford Networks Lewiston ME Oxford Networks Lewiston ME Oxford Networks Bemidji MN Paul Bunyan Tel Lower Burrell PA PCOM Comm. Pembroke WV Pembroke Tel Houston TX Phonoscope Colman SD Prairie Wave Flandreau SD Prairie Wave Gayville SD Prairie Wave Marshall								✓	
Bakersfield CA Newhouse Coweta County GA Newman Utilities							✓		
Coweta County GA Newman Utilities ✓ <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
Tyrone GA Newman Utilities	Bakersfield								
Iron Mountian MI Northside Cable TV Norwood MA Norwood Elec. Light New Ulm MN NuTel Ft. Worth TX One Source Osage IA Osage Municipal Util. Livingston TN Overton County Cable Auburn ME Oxford Networks Lewiston ME Oxford Networks Bemidji MN Paul Bunyan Tel Lower Burrell PA PCOM Comm. Vembroke WV Pembroke Tel Houston TX Phonoscope Colman SD Prairie Wave Flandreau SD Prairie Wave Gayville SD Prairie Wave MN Prairie Wave Pipestone MN Prairie Wave Slayton MN Prairie Wave MN Prairie Wave Slayton MN Prairie Wave Slayton MN Prairie Wave Slayton MN Prairie Wave Slayton MN Prairie Wave	Coweta County	GA	Newman Utilities					✓	
Norwood MA Norwood Elec. Light ✓ New Ulm MN NuTel ✓ Ft. Worth TX One Source ✓ Osage IA Osage Municipal Util. ✓ Livingston TN Overton County Cable ✓ Auburn ME Oxford Networks ✓ Lewiston ME Oxford Networks ✓ Lewiston ME Oxford Networks ✓ Bemidji MN Paul Bunyan Tel ✓ Lower Burrell PA PCOM Comm. ✓ Pembroke WV Pembroke Tel ✓ Houston TX Phonoscope ✓ Colman SD Prairie Wave ✓ Flandreau SD Prairie Wave ✓ Gayville SD Prairie Wave ✓ Luverne MN Prairie Wave ✓ Marshall MN Prairie Wave ✓ Slayton MN Prairie Wave	Tyrone	GA	Newman Utilities				✓	√	
New Ulm MN NuTel Ft. Worth TX One Source Osage IA Osage Municipal Util. Livingston TN Overton County Cable Auburn ME Oxford Networks Lewiston ME Oxford Networks Bemidji MN Paul Bunyan Tel Lower Burrell PA PCOM Comm. Pembroke WV Pembroke Tel Houston TX Phonoscope Colman SD Prairie Wave Gayville SD Prairie Wave Marshall MN Prairie Wave Pipestone MN Prairie Wave Slayton MN Prairie Wave Slayton MN Prairie Wave MN Prairie Wave Slayton MN Prairie Wave Slayton MN Prairie Wave	Iron Mountian	MI	Northside Cable TV						✓
Ft. Worth TX One Source	Norwood	MA	Norwood Elec. Light				✓		
Osage IA Osage Municipal Util. □ Livingston TN Overton County Cable □ Auburn ME Oxford Networks ✓ Lewiston ME Oxford Networks ✓ Bemidji MN Paul Bunyan Tel □ Lower Burrell PA PCOM Comm. ✓ Pembroke WV Pembroke Tel □ Houston TX Phonoscope □ Colman SD Prairie Wave □ Flandreau SD Prairie Wave □ Gayville SD Prairie Wave □ Luverne MN Prairie Wave □ Marshall MN Prairie Wave □ Slayton MN Prairie Wave □	New Ulm	MN	NuTel						
Livingston TN Overton County Cable Auburn ME Oxford Networks Lewiston ME Oxford Networks Bemidji MN Paul Bunyan Tel Lower Burrell PA PCOM Comm. ✓ Pembroke WV Pembroke Tel Houston TX Phonoscope Colman SD Prairie Wave Flandreau SD Prairie Wave Gayville SD Prairie Wave Luverne MN Prairie Wave Marshall MN Prairie Wave Slayton MN Prairie Wave Slayton MN Prairie Wave	Ft. Worth	TX	One Source					✓	
Auburn ME Oxford Networks ✓ Lewiston ME Oxford Networks ✓ Bemidji MN Paul Bunyan Tel Lower Burrell PA PCOM Comm. ✓ Pembroke WV Pembroke Tel Houston TX Phonoscope Colman SD Prairie Wave Flandreau SD Prairie Wave Gayville SD Prairie Wave Luverne MN Prairie Wave Marshall MN Prairie Wave Slayton MN Prairie Wave	Osage	IA	Osage Municipal Util.						
Auburn ME Oxford Networks ✓ Lewiston ME Oxford Networks ✓ Bemidji MN Paul Bunyan Tel Lower Burrell PA PCOM Comm. ✓ Pembroke WV Pembroke Tel Houston TX Phonoscope Colman SD Prairie Wave Flandreau SD Prairie Wave Gayville SD Prairie Wave Luverne MN Prairie Wave Marshall MN Prairie Wave Slayton MN Prairie Wave	Livingston	TN	Overton County Cable						
Bemidji MN Paul Bunyan Tel Lower Burrell PA PCOM Comm. Pembroke WV Pembroke Tel Houston TX Phonoscope Colman SD Prairie Wave Flandreau SD Prairie Wave Gayville SD Prairie Wave Luverne MN Prairie Wave Marshall MN Prairie Wave Slayton MN Prairie Wave MN Prairie Wave Slayton	Auburn	ME	Oxford Networks				✓		
Lower Burrell PA PCOM Comm. ✓	Lewiston	ME	Oxford Networks				✓		
Lower Burrell PA PCOM Comm. ✓	Bemidji	MN	Paul Bunyan Tel						
Pembroke WV Pembroke Tel Houston TX Phonoscope Colman SD Prairie Wave Flandreau SD Prairie Wave Gayville SD Prairie Wave Luverne MN Prairie Wave Marshall MN Prairie Wave Slayton MN Prairie Wave	Lower Burrell	PA		✓					
Colman SD Prairie Wave SD Slayton MN Prairie Wave SD	Pembroke	WV							
Colman SD Prairie Wave SD Slayton MN Prairie Wave SD	Houston	TX	Phonoscope						
Flandreau SD Prairie Wave	Colman								
Gayville SD Prairie Wave Image: Control of the property of the prope	Flandreau								
Luverne MN Prairie Wave Image: Control of the properties of the									
Marshall MN Prairie Wave									
Pipestone MN Prairie Wave Slayton MN Prairie Wave									
Slayton MN Prairie Wave									
,	•								
Storm Lake IA Prairie Wave	Storm Lake	IA	Prairie Wave						

	Failed	Failing			with a	Overbuilder is owned by Co-
	Overbuild	Overbuild	to be built	communities	Utility	ор
	_					
						✓
	ent √					
				✓		
7						
NE Qwest						
AZ Qwest						
AZ Qwest						
AZ Qwest						
AZ Qwest						
WA Ranier Group						
WA Ranier Group						
MA RCN						
NJ RCN	✓					
CA RCN	✓					
MA RCN						
MA RCN						
CA RCN				√		
CA RCN						
IL RCN				√		
				√		
	UT Provo Cable/Provo OK Quality Entertainm CO Qwest AZ Qwest CO Qwest AZ QW	ST CHALLENGER Overbuild MN Prairie Wave IA Prairie Wave SD Prairie Wave NY Princetown Cable ID Project Mutual Tel Coop UT Provo Cable/Provo OK Quality Entertainment CO Qwest AZ Qwest NE Qwest AZ Qwest AZ Qwest AZ Qwest NE Qwest AZ COUNCE AZ COU	ST CHALLENGER Overbuild Overbuild MN Prairie Wave IA Prairie Wave SD Prairie Wave NY Princetown Cable ID Project Mutual Tel Coop UT Provo Cable/Provo OK Quality Entertainment CO Qwest AZ	ST CHALLENGER Which have yet to be built MN Prairie Wave IA Prairie Wave SD Prairie Wave NY Princetown Cable ID Project Mutual Tel Coop UT Provo Cable/Provo OK Quality Entertainment CO Qwest AZ Qwest NE Qwest AZ Qwest AZ Qwest AZ Owest AZ Ow	ST CHALLENGER Overbuild Failing Overbuild which have yet to be built communities MN Prairie Wave IA Prairie Wave SD Prairie Wave ID Project Mutual Tel Coop UT Provo Cable/Provo OK Quality Entertainment CO Qwest AZ Couest AZ Owest AZ OWE	ST CHALLENGER Overbuild NN Prairie Wave IA Prairie Wave SD Prairie Wave ID Project Mutual Tel Coop UT Provo Cable/Provo OK Quality Entertainment CO Qwest AZ Rowst AZ Romst AZ Qwest AZ Romst AZ Qwest AZ Ron AZ Ron

			Failed	Failing	Overbuilds which have yet		with a	Overbuilder is owned by Co-
CITY	ST	CHALLENGER	Overbuild	Overbuild	to be built	communities	Utility	ор
Gardena	CA	RCN						
Hermosa Beach	CA	RCN	✓					
Hoboken	NJ	RCN	✓					
Lexington	MA	RCN						
Marlborough	MA	RCN						
Milton	MA	RCN						
Natick	MA	RCN						
Needham	MA	RCN						
New York	NY	RCN						
Newton	MA	RCN						
Quincy	MA	RCN						
Randolph	MA	RCN						
Redwood City	CA	RCN				✓		
S. San Francisco	CA	RCN				✓		
San Carlos	CA	RCN			✓			
San Mateo	CA	RCN						
Saugus	MA	RCN						
Somerville	MA	RCN						
Stoneham	MA	RCN						
Stoneham	MA	RCN						
Wakefield	MA	RCN						
Waltham	MA	RCN						
Watertown	MA	RCN						
Weymouth	MA	RCN						
Winchester	MA	RCN						
Woburn	MA	RCN						
Falls Church	VA	RCN Starpower						
Fredricksburg	VA	RCN Starpower						
Reinbeck	IA	Reinbeck Tel. & Util.						
St. John the Baptist	LA	Reserve Telecom						
Archbold	ОН	Ridgeville Tel				√		
Colby	KS	S&T Comm.						√
Cave City	KY	S.Central Rural Tel.						

CITY	ST CHALLENGER	Failed Overbuild	Failing Overbuild	Overbuilds which have yet to be built	Overbuild targeted non-rebuilt communities	Overbuild is affiliated with a Utility	Overbuilder is owned by Co-
Hiseville	KY S.Central Rural Tel.						
Horse Cave	KY S.Central Rural Tel.						
Concord	CA Seren Innovations				✓	✓	
St. Cloud	MN Seren Innovations					✓	
Walnut Creek	CA Seren Innovations				✓	✓	
Plaquemine	LA Service One						
Newburgh	IN Sigecom				✓	✓	
Spanish Fork	UT Spanish Fork Com. Ne	t					
Spencer	IA Spencer Munic. Util.						
Arlington	VA Starpower			√		✓	
Montgomery Cnty	MD Starpower					✓	
Prince George's Cnty	MD Starpower			✓		✓	
Washington	DC Starpower					✓	
Sacramento	CA Strategic Technologies	;			✓		
Houston County	GA SunTel						
Sacramento	CA Sure West				✓		
Pierce County	WA Tacoma Power				✓		
St. Marys	OH Telephone Service Co.						
Wapakoneta	OH Telephone Service Co.						
Dothan	AL Time Warner						
Louisville	KY TotalLink (Utilicom/Ved	etren)					
Houston	TX TV Max						
Cincinnati (N. Ohio)	OH TWC				✓		
Citrus County	FL TWC					✓	
Leander	TX TWC						
Mount Airy	NC TWC				✓		
Orlando	FL TWC					✓	
Pflugerville	TX TWC						
Poway	CA TWC						
San Diego	CA TWC						
Tampa	FL TWC					✓	
Chula Vista	CA Ultronics						
National City	CA Ultronics						

				<u> </u>			<u> </u>
CITY	ST CHALLENGER	Failed	Failing	Overbuilds which have yet	Overbuild targeted non-rebuilt communities	with a	Overbuilder is owned by Co-
		Overbuild	Overbuild	to be built	communities	Utility	ор
Cobb County	GA United Telesystems						
Park Rapids	MN Unitel (W.Central Tel.)						
Salem	IL US Sonet						
Centerville	GA Watson Cable						
Lake Wildwood	GA Watson Cable						
Macon	GA Watson Cable						
Warner Robins	GA Watson Cable						
Berea	OH WideOpenWest				✓		
Berkley	MI WideOpenWest				✓		
Bexley	OH WideOpenWest						
Brentwood	MO WideOpenWest	✓					
Brook Park	OH WideOpenWest				✓		
Brooklyn	OH WideOpenWest				✓		
Canton	MI WideOpenWest						
Centerline	MI WideOpenWest				✓		
Chicago	IL WideOpenWest				✓		
Chicago Heights	IL WideOpenWest				✓		
Clawson	MI WideOpenWest				✓		
Clinton	MI WideOpenWest				✓		
Clinton Twp	OH WideOpenWest						
Colorado Springs	CO WideOpenWest			✓			
Columbus	OH WideOpenWest						
Crestwood	IL WideOpenWest				✓		
Creve Coeur	MO WideOpenWest	✓					
Des Plaines	IL WideOpenWest				✓		
Dublin	OH WideOpenWest						
Eastpointe	MI WideOpenWest				✓		
Elgin	IL WideOpenWest				✓		
Fairview Park	OH WideOpenWest						
Ferndale	MI WideOpenWest				✓		
Fraser	MI WideOpenWest				✓		
Gahanna	OH WideOpenWest						
Garfield Heights	OH WideOpenWest				√		

CITY	ST CHALLENGER	Failed Overbuild	Failing Overbuild	Overbuild Overbuilds targeted non- which have yet to be built communities	Overbuild is affiliated with a owned by Co- Utility op
Glen Ellyn	IL WideOpenWest	Overballa	Overbana	to be built communities	Sunty Op
Glenview	IL WideOpenWest			· ·	
Grandview Heights	OH WideOpenWest			·	
Hammond	IN WideOpenWest			√	
Harrison Twp	MI WideOpenWest			· ·	
Harvey	IL WideOpenWest			, , , , , , , , , , , , , , , , , , ,	
Hilliard	OH WideOpenWest				
Jackson Twp.	OH WideOpenWest				
Kirkwood	MO WideOpenWest	√			
Lakeville	MN WideOpenWest	·			
Macomb	MI WideOpenWest	· ·		√	
Madison Hts	MI WideOpenWest	· · · · · · · · · · · · · · · · · · ·		, , , , , , , , , , , , , , , , , , ,	
Manchester	MO WideOpenWest	√			
Maple Heights	OH WideOpenWest	,		√	
Maplewood	MO WideOpenWest	√		•	
Marble Cliff	OH WideOpenWest	· · · · · · · · · · · · · · · · · · ·			
Middleburg Heights	OH WideOpenWest			√	
Mifflin Twp.	OH WideOpenWest				
Minerva Park	OH WideOpenWest				
Mount Clemens	MI WideOpenWest			√	
Mount Prospect	IL WideOpenWest			, , , , , , , , , , , , , , , , , , ,	
Naperville	IL WideOpenWest			√	
New Rome	OH WideOpenWest			•	
North Olmsted	OH WideOpenWest			√	
North Royalton	OH WideOpenWest			, , , , , , , , , , , , , , , , , , ,	
Northville	MI WideOpenWest			<u> </u>	
Oak Forest	IL WideOpenWest			√	
Obetz	OH WideOpenWest			,	
Orland Park	IL WideOpenWest			√	
Palos Park	IL WideOpenWest			√	
Palos Park	IL WideOpenWest			<u> </u>	
Perry Twp.	OH WideOpenWest				
Plymouth	MI WideOpenWest				
i iyiiloutii	IVII VVIUGOPEIIVVESL				

CITY	ST CHALLENGER	Failed Overbuild	Failing Overbuild	Overbuild Overbuilds targeted non- which have yet to be built communities	Overbuild is affiliated overbuilder is with a owned by Co- Utility op
Prospect Park	IL WideOpenWest	Overbuild	Overbuild	to be built communities	Othity
Riverlea	OH WideOpenWest				
Robbins	IL WideOpenWest			√	
Rochester	MI WideOpenWest			· · ·	
Rochester Hills	MI WideOpenWest			· · · · · · · · · · · · · · · · · · ·	
Royal Oak	MI WideOpenWest			· · · · · · · · · · · · · · · · · · ·	
Schaumburg	IL WideOpenWest			√	
Shaker Heights	OH WideOpenWest			√	
Sharon Twp.	OH WideOpenWest			•	
South Holland	IL WideOpenWest			✓	
St. Ann	MO WideOpenWest	✓		•	
St. Clair Shores	MI WideOpenWest	•		√	
St. Louis	MO WideOpenWest	✓		•	
St. Peters	MO WideOpenWest	→			
Sterling Hts.	MI WideOpenWest	•		✓	
Streamwood Village	IL WideOpenWest			· · · · · · · · · · · · · · · · · · ·	
Strongsville	OH WideOpenWest			· · · · · · · · · · · · · · · · · · ·	
Troy	MI WideOpenWest			· · · · · · · · · · · · · · · · · · ·	
University City	MO WideOpenWest	✓		•	
Upper Arlington	OH WideOpenWest	•			
Utica	MI WideOpenWest			√	
Valley View	OH WideOpenWest			√	
Vernon Hills	IL WideOpenWest			· · · · · · · · · · · · · · · · · · ·	
Warren	MI WideOpenWest			· · · · · · · · · · · · · · · · · · ·	
Westlake	OH WideOpenWest			· · ·	
Wheeling	IL WideOpenWest			√	
Worthington	OH WideOpenWest			,	
Minneapolis	MN WideOpenWest/Everest	✓			
Richfield	MN WideOpenWest/Everest	· ·			
Austin	TX WIN	√			
Houston	TX WIN	·			
Phoenix	AZ WIN	· ·			
San Diego	CA WIN	→			
oan biego	UA VVIIN	,			

			Failed	Failing	Overbuilds which have yet	•		Overbuilder is owned by Co-
CITY	ST	CHALLENGER	Overbuild	Overbuild	to be built	communities	Utility	ор
San Francisco	CA	WIN	✓					
Las Vegas	NV	WIN	✓					
Seattle	WA	WIN/RCN			✓			
Texline	TX	XIT Comm.						

		municipally	with a out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST CHALLENGER	owned	telecom franchise	requirements	communities
20 cities	RI ABI				
La Crescent	MN ACE Comm.				✓
Camarillo	CA Adelphia		✓		✓
Encinitas	CA Adelphia		✓	✓	
Malibu	CA Adelphia		✓		✓
Oxnard	CA Adelphia		✓		✓
Port Hueneme	CA Adelphia		✓		✓
San Marcos	CA Adelphia		✓	✓	✓
Ventura	CA Adelphia		✓	✓	✓
Flora	IL Advance Technologies				
Alameda	CA Alameda Power	✓			
Algona	IA Algona Municipal Util.	✓			
Evanston	WY All West Comm.		✓		✓
Alta	IA Altatec				
Arcadia	CA Altrio				✓
Monrovia	CA Altrio				✓
San Gabriel Valley	CA Altrio		✓	✓	
Sierra Madre	CA Altrio				✓
Ann Arbor	MI American Broadband				
E. Lansing	MI American Broadband				
Lansing	MI American Broadband				
St. Joseph Twp.	MN Astound Broadband				✓
Pultney	OH Bellaire Cable TV		✓		
Bartlett	TN BellSouth				
South Dade County	FL BellSouth		✓		
Winder	GA BellSouth		✓		
Cherokee County	GA BellSouth Entertainment		✓ ✓	✓	
Cobb County	GA BellSouth Entertainment		✓ ✓	✓	
Duluth	GA BellSouth Entertainment		✓ ✓	√	
Gwinnett County	GA BellSouth Entertainment		✓ ✓	√	
Roswell	GA BellSouth Entertainment		✓ ✓	√	
Woodstock	GA BellSouth Entertainment		✓ ✓	√	
Chamblee	GA BellSouth Interactive		✓		✓

CITY	ST CHALLENGER	Overbuild is municipally owned	Overbuild is affiliated with a telecom Overbuilder not required to build out the entire franchise	Overbuilder has different franchse requirements Overbuilder targeted high density communities
DeKalb	GA BellSouth Interactive	OWITEG	telecom manchise	requirements communities
St. John's County	FL BellSouth Interactive		· · · · · · · · · · · · · · · · · · ·	√
Fallowfield	PA Bentleyville Cable		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Albany	NY Berkshire Tel		<i>'</i>	
Rapid City	SD Black Hills GLA		· ·	
Skagit County	WA Black Rock Cable			
Snohomish County	WA Black Rock Cable WA Black Rock Cable			
Whatcom County	WA Black Rock Cable WA Black Rock Cable			
Braintree	MA Braintree Elec. Light	√		
Elizabethtown/Hardi	KY Brandenburg Telecom	,	√	√
Ocala	FL BrightHouse		·	·
Abington	VA Bristol Virginia Utilities	√	,	,
Glade Spring	VA Bristol Virginia Utilities	· ✓		
Horton Twp.	PA Brockway TV	√		
Kane	PA Brockway TV	√		
Bryan	OH Bryan Municipal Cable	√		
Waterville	OH Buckeye Cable			
Maryland Hts	MO Cable America			
Mesa	AZ Cable America		✓	
Sacramento	CA Cable America		✓	√
Cameron	LA Cameron Tel.		√	
Hackberry	LA Cameron Tel.		✓	
Charlotte	NC Carolina Broadband			
Columbia	SC Carolina Broadband			
Durham	NC Carolina Broadband			
Greensboro	NC Carolina Broadband			
Greenville	SC Carolina Broadband			
Raleigh	NC Carolina Broadband			
Spartanburg	SC Carolina Broadband			
Winston Salem	NC Carolina Broadband			
Cedar Falls	IA Cedar Falls Utilities	✓		✓
Clearview	WV Centre TV		✓	
Ohio County	WV Centre TV		✓	

		municipally	affiliated with a	required to build out the entire	Overbuilder has different franchse	Overbuilder targeted high density
		owned	telecom		requirements	communities
				✓		✓
			✓			
						✓
CO	Champion Broadband					✓
WV	Charter			✓	✓	
IN						✓
VA	Chatmoss Tel.					
MN	Chequamegon Coop					✓
WI	Chibardun Coop					
WI	Chibardun Coop					
WI	Chibardun Coop					
PA	Citizens Cable		✓	✓	✓	✓
AL	City Cablevision	✓		✓	✓	✓
СТ		✓				
IL	City of Galesburg					
ОН	City of Lebanon	✓				✓
MI	City of Negaunee	✓		✓	✓	✓
IA	CL Tel		✓			✓
FL	Clear Link			✓	✓	
TX	ClearSource (Grande)					
TX						
LA	CMA Cablevision			✓		
MI	Coldwater BPU	√			✓	✓
ОН	Columbus Grove Tel.		✓			
AL	Comcast			✓	✓	√
	Comcast			✓		√
WV				✓		√
VA	Conneaut Tel.		√			
			√			
			√			
				✓		
	IN VA MN WI WI PA AL CT IL OH MI IA FL TX TX LA MI OH AL MI WV	WV Centre TV OH Champaign County Tel CO Champion Broadband CO Champion Broadband WV Charter IN Charter IN Charter VA Chatmoss Tel. MN Chequamegon Coop WI Chibardun Coop WI Chibardun Coop WI Chibardun Coop CT City of Bridgeport IL City of Galesburg OH City of Lebanon MI City of Negaunee IA CL Tel FL Clear Link TX ClearSource (Grande) TX ClearSource (Grande) LA CMA Cablevision MI Coldwater BPU OH Columbus Grove Tel. AL Comcast MI Comcast WV Community Antenna VA Conneaut Tel. MN Connections RI Cox RI Cox	municipally owned WV Centre TV OH Champaign County Tel CO Champion Broadband CO Champion Broadband WV Charter IN Charter VA Chatmoss Tel. MN Chequamegon Coop WI Chibardun Coop WI Chibardun Coop WI Chibardun Coop CT City of Bridgeport IL City of Galesburg OH City of Negaunee IA CL Tel FL Clear Link TX ClearSource (Grande) LA CMA Cablevision MI Coldwater BPU OH Columbus Grove Tel. AL Comcast MI Comcast WV Community Antenna VA Conneaut Tel. MN Connections RI Cox RI COX RI COX RI COX MI Codempion County Tel COC Champion Devate Tel Coc Champion County Tel Contact COC Champion County Tel Coc Champion Coop Champio	ST CHALLENGER owned with a telecom WV Centre TV OH Champaign County Tel CO Champion Broadband CO Champion Broadband WV Charter IN Charter IN Charter VA Chatmoss Tel. MN Chequamegon Coop WI Chibardun Coop WI Chibardun Coop WI Chibardun Coop WI Chibardun Coop The Citizens Cable AL City Cablevision CT City of Bridgeport IL City of Galesburg OH City of Negaunee IA CL Tel FL Clear Link TX ClearSource (Grande) LA CMA Cablevision MI Coldwater BPU OH Columbus Grove Tel. AL Comcast WV Community Antenna VA Conneaut Tel. MN Connections RI Cox RI Cox RI COX	ST CHALLENGER WU Centre TV OH Champaign County Tel CO Champion Broadband CO Champion Broadband WV Charter IN Charter VA Chatmoss Tel. MN Chequamegon Coop WI Chibardun Coop WI Chibardun Coop WI Chibardun Coop Totty of Bridgeport IL City of Bridgeport IL City of Galesburg OH City of Negaunee IA CL Tel FL Clear Link TX ClearSource (Grande) TX ClearSource (Grande) LA Comcast MI Comcast WV Community Antenna VA Conneaut Tel. MN Connections RI Cox With a telecom municipally with a telecom franchise out the entire franchise with a telecom franchise out the entire franchise franchise franchise out the entire franchise franchise out the entire franchise franchise	ST CHALLENGER owned with a municipally with a celecom franchise required to build out the entire franchise requirements WV Centre TV

	0.7		municipally	affiliated with a	Overbuilder not required to build out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST	CHALLENGER	owned	telecom	franchise	requirements	communities
Central	FL	Cox			,		
Claremore	OK	Cox			√	✓	✓
Spotsylvania	VA	Cox					
Warren	RI	Cox					
Arma	KS	Craw-Kan Tel. Coop		√		✓	
Franklin	KS	Craw-Kan Tel. Coop		√		✓	
State College	PA	D&E Comm.		✓			✓
Britton	MI	D&P Cable		✓			
Morenci	OH	D&P Cable		✓			
Darien	GA	Darien Cable		✓	✓		✓
Middleburg	NJ	DeCom					
Charlotte	NC	DeCom Corp					
Blissfield	MI	Deerfield Farmers Tel		✓	✓		✓
Delhi	NY	Delhi Tel.		✓		✓	
Indianapolis	IN	Digital Access					
Kansas City	MO	Digital Access					
Milwaukee	WI	Digital Access					
Nashville	TN	Digital Access					
Austin	TX	Digital Union					
Chippewa Twp.	ОН	Doylestown Comm.		✓	✓	✓	
Doylestown Village	ОН	Doylestown Comm.		✓	✓	✓	
Elberton	GA	Elberton Utilities	✓		✓		✓
Willmar	MN	En-Tel					
Eden Prairie	MN	Everest					
Edina	MN	Everest					
Hopkins	MN	Everest					
Minnetonka	MN	Everest					
Lenexa	KS	Everest Connections					✓
Mission	KS	Everest Connections					
Mission	KS	Everest Connections					✓
St. Charles County	МО	Everest Connections					
O'Fallon	МО	Everest/WideOpenWest					
Fairburn	GA	Fairburn Utilities	√		✓	✓	

			municipally	affiliated with a	Overbuilder not required to build out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST	CHALLENGER	owned	telecom	franchise	requirements	communities
Bridgeport	СТ	FiberVision					
Hartford	СТ	FiberVision					
New Haven	СТ	FiberVision					
Elk Grove	CA	Frontier		✓	✓		✓
Laurens	IA	Future Net	✓				
Blackwell	OK	Get LLC					
Dothan	AL	Graceba		✓	✓	✓	
Dothan	AL	Graceba		✓	✓	✓	✓
Alamo Heights	TX	Grande Comm.					✓
Austin	TX	Grande Comm.					✓
Balcones Heights	TX	Grande Comm.					✓
Castle Hilles	TX	Grande Comm.					✓
Cibolo	TX	Grande Comm.					✓
Corpus Christi	TX	Grande Comm.				✓	✓
Houston	TX	Grande Comm.					
Kirby	TX	Grande Comm.					✓
Leon Valley	TX	Grande Comm.					✓
Live Oak	TX	Grande Comm.					✓
Midland	TX	Grande Comm.					✓
Odessa	TX	Grande Comm.				✓	✓
Olmos Park	TX	Grande Comm.					✓
San Antonio	TX	Grande Comm.					✓
San Marcos	TX	Grande Comm.					✓
Schetz	TX	Grande Comm.					✓
Selma	TX	Grande Comm.					✓
Terrell Hills	TX	Grande Comm.					√
Waco	TX	Grande Comm.					√
Windcrest	TX	Grande Comm.					√
Greenville	TX	Greenville Elec. Util.	√		✓	✓	
Grundy Center	IA	Grundy Center Munic.	√				
Savannah	GA	Hargray Comm.		√	✓		✓
Harlan	IA	Harlan Municipal Util.	√				
Hartwell	GA	Hart Cable		√			✓

			Overbuild is municipally	affiliated with a	Overbuilder not required to build out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST	CHALLENGER	owned	telecom	franchise	requirements	communities
Winona	MN	Hiawatha Broadband					
Hawarden	IA	HiTec Municipal	✓				
Mason County	WA	Hood Canal Cable			✓		
Shelton	WA	Hood Canal Cable					
Chillicothe	ОН	Horizon Telecom		✓			
Conway	SC	Horry Tel. Coop		✓	✓	✓	
Georgetown	SC	Horry Tel. Coop		✓			
Horry County	SC	Horry Tel. Coop		✓	✓	✓	✓
N. Myrtle Beach	SC	Horry Tel. Coop		✓	✓		✓
Cecil	PA	HTC Comm.		✓	✓		
Houston	PA	HTC Comm.		✓	✓		
Mt. Pleasant	PA	HTC Comm.		✓	✓		
Independence	IA	Indep. Light & Power	✓				✓
Kenmore	NY	Intertech Private Cable					
Kenton-Boone City	KY	Kenton Boone City					
Augusta	GA	Knology				✓	✓
Charleston	SC	Knology			✓		✓
Huntsville	AL	Knology			✓	✓	
Knoxville	TN	Knology				✓	✓
Louisville	KY	Knology					
Nashville (Mid. TN)	TN	Knology					
Panama City	FL	Knology					
Summerville/Dorches.	SC	Knology			✓		
Durand	MI	Lennon Tel. Co.		√	✓		
Lexington	NC	LexCom					
Davidson County	NC	Lexicom Cable Ser.		✓			✓
Fallsburg	KY	Lycom			✓		
Little Rock	AR	Lyncstar					
Sauk Centre	MN	Mainstreet Comm.		√			
Milledgeville	GA	Mallard Cablevision			✓	✓	√
Naples	FL	Marco Island Cable				✓	√
Cedar Rapids	IA	McLeod		√		✓	√
Memphis	TN	Memphis Networx					

			municipally	affiliated with a	Overbuilder not required to build out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST	CHALLENGER	owned	telecom	franchise	requirements	communities
Shelby County	TN	Memphis Networx					
Albany	NY	Midtel Cable TV		√	✓	✓	
Anne Arundel Cnty	MD	Millennium			✓		
Social Circle	GA	Monroe Utilities	✓			✓	
Walton County	GA	Monroe Utilities	✓		✓	✓	✓
Morristown	NJ	Morristown Util. System					
Dodgeville	WI	Mount Horeb Telecom		✓			✓
Murray	KY	Murray Electric					✓
Minster	ОН	New Knoxville Tel.		✓			
Moulton	ОН	New Knoxville Tel.		✓	✓	✓	
Bakersfield	CA	Newhouse					
Coweta County	GA	Newman Utilities					
Tyrone	GA	Newman Utilities					
Iron Mountian	MI	Northside Cable TV			✓		✓
Norwood	MA	Norwood Elec. Light	✓				
New Ulm	MN	NuTel					
Ft. Worth	TX	One Source			✓		✓
Osage	IA	Osage Municipal Util.	✓				✓
Livingston	TN	Overton County Cable					
Auburn	ME	Oxford Networks		✓	✓	✓	✓
Lewiston	ME	Oxford Networks		✓	✓	✓	✓
Bemidji	MN	Paul Bunyan Tel		✓			
Lower Burrell	PA	PCOM Comm.			✓		
Pembroke	WV	Pembroke Tel		√	✓		
Houston	TX	Phonoscope			✓	√	✓
Colman	SD	Prairie Wave		✓			
Flandreau	SD	Prairie Wave		✓			
Gayville	SD	Prairie Wave		√			
Luverne	MN	Prairie Wave		√			
Marshall	MN	Prairie Wave					
Pipestone	MN	Prairie Wave		✓			
Slayton	MN	Prairie Wave		√			
Storm Lake	IA	Prairie Wave		√			

			municipally	affiliated with a	Overbuilder not required to build out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST	CHALLENGER	owned	telecom	franchise	requirements	communities
Tracy	MN	Prairie Wave					
Worthington	IA	Prairie Wave		✓			
Yankton	SD	Prairie Wave		✓			
Albany	NY	Princetown Cable			✓	✓	
Rupert	ID	Project Mutual Tel Coop					✓
Provo	UT	Provo Cable/Provo	✓		✓		✓
Poteau	OK	Quality Entertainment					
Boulder	CO	Qwest		✓			✓
Chandler	ΑZ	Qwest		√	✓		
Douglas County	CO	Qwest		√			✓
Gilbert	AZ	Qwest		√	✓		
Glendale	AZ	Qwest		✓	✓		
Maricopa County	ΑZ	Qwest		✓	✓		
Omaha	NE	Qwest		✓	✓	✓	✓
Paradise Valley	ΑZ	Qwest		✓	✓		
Peoria	AZ	Qwest		✓	✓		
Phoenix	ΑZ	Qwest		✓	✓		
Scottsdale	ΑZ	Qwest		✓	✓		
Eatonville	WA	Ranier Group		✓		✓	
Pierce County	WA	Ranier Group		✓	✓	✓	
Arlington	MA	RCN					✓
Bayonne	NJ	RCN					
Beverly Hills	CA	RCN					
Boston	MA	RCN					✓
Brookline	MA	RCN					✓
Burlingame	CA	RCN				✓	✓
Burlington	MA	RCN					✓
Carson	CA	RCN				√	✓
Chicago	IL	RCN			✓		✓
Daly City	CA	RCN				✓	✓
Dedham	MA	RCN					✓
Delaware County	PA	RCN			✓		✓
Framingham	MA	RCN					✓

			Overbuild is municipally	affiliated with a	Overbuilder not required to build out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST	CHALLENGER	owned	telecom	franchise	requirements	communities
Gardena	CA	RCN				✓	
Hermosa Beach	CA	RCN					
Hoboken	NJ	RCN					
Lexington	MA	RCN					✓
Marlborough	MA	RCN					✓
Milton	MA	RCN					✓
Natick	MA	RCN					✓
Needham	MA	RCN					✓
New York	NY	RCN			✓	✓	✓
Newton	MA	RCN					✓
Quincy	MA	RCN					✓
Randolph	MA	RCN					✓
Redwood City	CA	RCN				✓	
S. San Francisco	CA	RCN			✓	✓	✓
San Carlos	CA	RCN				✓	
San Mateo	CA	RCN				✓	✓
Saugus	MA	RCN					✓
Somerville	MA	RCN					✓
Stoneham	MA	RCN					✓
Stoneham	MA	RCN					✓
Wakefield	MA	RCN					✓
Waltham	MA	RCN					✓
Watertown	MA	RCN					✓
Weymouth	MA	RCN					✓
Winchester	MA	RCN					✓
Woburn	MA	RCN					✓
Falls Church	VA	RCN Starpower			✓	✓	✓
Fredricksburg	VA	RCN Starpower			✓	✓	✓
Reinbeck	IA	Reinbeck Tel. & Util.	✓				✓
St. John the Baptist	LA	Reserve Telecom					✓
Archbold	ОН	Ridgeville Tel		✓			
Colby	KS	S&T Comm.					
Cave City	KY	S.Central Rural Tel.		√			

			municipally	affiliated with a	Overbuilder not required to build out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST	CHALLENGER	owned	telecom	franchise	requirements	communities
Hiseville	KY	S.Central Rural Tel.		✓			
Horse Cave	KY	S.Central Rural Tel.		✓			
Concord	CA	Seren Innovations				✓	✓
St. Cloud	MN	Seren Innovations					
Walnut Creek	CA	Seren Innovations				✓	✓
Plaquemine	LA	Service One			✓		✓
Newburgh	IN	Sigecom					
Spanish Fork	UT	Spanish Fork Com. Net	✓			✓	✓
Spencer	IA	Spencer Munic. Util.	✓				✓
Arlington	VA	Starpower					
Montgomery Cnty	MD	Starpower			✓	✓	✓
Prince George's Cnty	MD	Starpower				✓	
Washington	DC	Starpower			✓		
Sacramento	CA	Strategic Technologies			✓		✓
Houston County	GA	SunTel		✓		✓	
Sacramento	CA	Sure West		✓			✓
Pierce County	WA	Tacoma Power	✓				
St. Marys	ОН	Telephone Service Co.		✓			
Wapakoneta	ОН	Telephone Service Co.		✓		✓	
Dothan	AL	Time Warner			✓	✓	
Louisville	KY	TotalLink (Utilicom/Vectren)					
Houston	TX	TV Max			✓	✓	✓
Cincinnati (N. Ohio)	ОН	TWC					
Citrus County	FL	TWC					
Leander	TX	TWC			✓	✓	
Mount Airy	NC	TWC					
Orlando	FL	TWC					
Pflugerville	TX	TWC			✓	√	
Poway	CA	TWC			✓	✓	
San Diego	CA	TWC			✓		
Tampa	FL	TWC					
Chula Vista	CA	Ultronics					✓
National City	CA	Ultronics					✓

CITY	CT CHALLENGED	Overbuild is municipally	Overbuild is affiliated out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST CHALLENGER	owned	telecom franchise	requirements	communities
Cobb County	GA United Telesystems		√		
Park Rapids	MN Unitel (W.Central Tel.)		✓		
Salem	IL US Sonet				
Centerville	GA Watson Cable				
Lake Wildwood	GA Watson Cable			✓	✓
Macon	GA Watson Cable		✓	✓	
Warner Robins	GA Watson Cable		✓	✓	
Berea	OH WideOpenWest				
Berkley	MI WideOpenWest			✓	✓
Bexley	OH WideOpenWest				
Brentwood	MO WideOpenWest				
Brook Park	OH WideOpenWest				
Brooklyn	OH WideOpenWest				
Canton	MI WideOpenWest			✓	
Centerline	MI WideOpenWest			✓	✓
Chicago	IL WideOpenWest				✓
Chicago Heights	IL WideOpenWest				✓
Clawson	MI WideOpenWest			✓	✓
Clinton	MI WideOpenWest			✓	✓
Clinton Twp	OH WideOpenWest				
Colorado Springs	CO WideOpenWest				
Columbus	OH WideOpenWest				
Crestwood	IL WideOpenWest				✓
Creve Coeur	MO WideOpenWest				
Des Plaines	IL WideOpenWest				✓
Dublin	OH WideOpenWest				
Eastpointe	MI WideOpenWest			√	√
Elgin	IL WideOpenWest				✓
Fairview Park	OH WideOpenWest		✓		
Ferndale	MI WideOpenWest			✓	√
Fraser	MI WideOpenWest			✓	√
Gahanna	OH WideOpenWest				
Garfield Heights	OH WideOpenWest				

		Overbuild is municipally	Overbuild is affiliated with a Overbuilder not required to build out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST CHALLENGER	owned	telecom franchise	requirements	communities
Glen Ellyn	IL WideOpenWest				√
Glenview	IL WideOpenWest				✓
Grandview Heights	OH WideOpenWest				
Hammond	IN WideOpenWest				√
Harrison Twp	MI WideOpenWest			✓	✓
Harvey	IL WideOpenWest				✓
Hilliard	OH WideOpenWest				
Jackson Twp.	OH WideOpenWest				
Kirkwood	MO WideOpenWest				
Lakeville	MN WideOpenWest				
Macomb	MI WideOpenWest			✓	
Madison Hts	MI WideOpenWest			✓	✓
Manchester	MO WideOpenWest				
Maple Heights	OH WideOpenWest				
Maplewood	MO WideOpenWest				
Marble Cliff	OH WideOpenWest				
Middleburg Heights	OH WideOpenWest				
Mifflin Twp.	OH WideOpenWest				
Minerva Park	OH WideOpenWest				
Mount Clemens	MI WideOpenWest			✓	✓
Mount Prospect	IL WideOpenWest				✓
Naperville	IL WideOpenWest				✓
New Rome	OH WideOpenWest				
North Olmsted	OH WideOpenWest				
North Royalton	OH WideOpenWest				
Northville	MI WideOpenWest			✓	
Oak Forest	IL WideOpenWest				√
Obetz	OH WideOpenWest				
Orland Park	IL WideOpenWest				✓
Palos Park	IL WideOpenWest				√
Palos Park	IL WideOpenWest				√
Perry Twp.	OH WideOpenWest				
Plymouth	MI WideOpenWest			✓	

	O.T.		Overbuild is municipally	affiliated with a	Overbuilder not required to build out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST	CHALLENGER	owned	telecom	franchise	requirements	communities
Prospect Park	IL	WideOpenWest					✓
Riverlea	OH	WideOpenWest					
Robbins	IL	WideOpenWest					√
Rochester	MI	WideOpenWest				√	√
Rochester Hills	MI	WideOpenWest				✓	✓
Royal Oak	MI	WideOpenWest				✓	✓
Schaumburg	IL	WideOpenWest					✓
Shaker Heights	ОН	WideOpenWest					
Sharon Twp.	ОН	WideOpenWest					
South Holland	IL	WideOpenWest					✓
St. Ann	MO	WideOpenWest					
St. Clair Shores	MI	WideOpenWest				✓	✓
St. Louis	MO	WideOpenWest					
St. Peters	MO	WideOpenWest					
Sterling Hts.	MI	WideOpenWest				✓	✓
Streamwood Village	IL	WideOpenWest					✓
Strongsville	ОН	WideOpenWest					
Troy	MI	WideOpenWest				✓	✓
University City	MO	WideOpenWest					
Upper Arlington	ОН	WideOpenWest					
Utica	MI	WideOpenWest				✓	✓
Valley View	ОН	WideOpenWest					
Vernon Hills	IL	WideOpenWest					✓
Warren	MI	WideOpenWest				✓	✓
Westlake	ОН	WideOpenWest					
Wheeling	IL	WideOpenWest					✓
Worthington	ОН	WideOpenWest					
Minneapolis	MN	WideOpenWest/Everest					
Richfield	MN	WideOpenWest/Everest					
Austin	TX	WIN					
Houston	TX	WIN					
Phoenix	ΑZ	WIN					
San Diego	CA	WIN					

			Overbuild is	affiliated	Overbuilder not required to build out the entire	Overbuilder has different franchse	Overbuilder targeted high density
CITY	ST	CHALLENGER	owned	telecom	franchise	requirements	communities
San Francisco	CA	WIN					
Las Vegas	NV	WIN					
Seattle	WA	WIN/RCN					
Texline	TX	XIT Comm.		✓			

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EDUCATION

Ph.D., STANFORD UNIVERSITY, Economics, 1980.

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PRESENT POSITIONS

MICHIGAN STATE UNIVERSITY, Department of Telecommunication.

James H. Quello Professor of Telecommunication Studies

MICHIGAN STATE UNIVERSITY, Quello Center for Telecommunication Management & Law. Director

ACADEMIC AND PROFESSIONAL EXPERIENCE

Northwestern University, Department of Communication Studies, 1988-1999. Associate Professor

Northwestern University, Program in Telecommunications Science, Management & Policy, 1990-1999. Director

ECONOMISTS INCORPORATED, 1983 - 1988.

Senior Economist

UNIVERSITY OF CALIFORNIA, Los Angeles, Department of Economics, 1979 - 1983. Assistant Professor

RAND CORPORATION, 1981 - 1983.

Consultant

FELLOWSHIPS AND AWARDS

Van Zelst Research Professor of Communication, Northwestern University, 1996-1997

McGannon Award for Social and Ethical Relevance in Communication Policy Research for 1992.

Ameritech Research Fellow, Northwestern University, 1990 - 1991.

Ameritech Research Professorship, Northwestern University, 1989 - 1990.

National Science Foundation Fellowship, 1974 - 1977

PUBLICATIONS

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¹ Senior author.

² Equal joint author.

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³ Joint author credited as a "with."

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OTHER PROFESSIONAL ACTIVITIES

Co-convener, conference on telecommunications free trade zones, Northwestern University, March 30, 1992. Sponsored by the Annenberg Washington Program of Northwestern University and the Illinois Commerce Commission.

Convener, half-day conference on electronic services networks at Northwestern University, April 9, 1990

Co-convener, day-long Washington, D.C. conference on electronic services networks sponsored by the Annenberg Washington Program, February 23, 1990.

Member, Editorial Board, Journal of Media Economics.

Member of Organizing Committee for the Nineteenth and Twentieth Annual Telecommunications Policy Research Conference, Solomon Island, MD.

Member, Executive Committee, Consortium for Research in Telecommunications.

Organizer, 1996 Conference on Telecommunications Policy and Strategy of the Consortium for Research in Telecommunications Policy, Evanston, IL, May 10,11, 1996

Co-organizer, Telecommunication Policy and Law Symposium: "Preventing Flawed Communication Policies by addressing Constitutuinoal Principles", Washington, D.C., April 18, 2000.

Member, National Research Council Broadband Last Mile Committee, Fall 1999-present.

REFEREEING AND REVIEWING

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Communication Law and Policy, referee

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International Journal on Media Management, Associated Reviewer and referee,

Journal of Broadcasting and Electronic Media, referee

Journal of Communication, book reviewer

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Journal of International Economics, referee

Journal of Economic Literature, book reviewer

Journal of Industrial Economics, referee Journal of Media Economics, editorial board, referee National Science Foundation, proposal reviewer The Rand Journal of Economics, referee





RESPONSE OF THE NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

TO

ALLEGATIONS CONTAINED IN NATOA'S MARCH 2003 REPORT
AS SUBMITTED FEBRUARY 11, 2004
DURING THE SUBCOMMITTEE HEARING ON
"CABLE COMPETITION – INCREASING PRICE; INCREASING VALUE?"

SUBCOMMITTEE ON ANTITRUST,
COMPETITION POLICY AND CONSUMER RIGHTS
COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE
WASHINGTON, D.C.

MARCH 11, 2004

INTRODUCTION

The National Cable & Telecommunications Association ("NCTA") submits this response to the "Report on Anticompetitive Practices by Incumbent Cable Operators," which the National Association of Telecommunications Officers and Advisers ("NATOA") submitted to the Senate Judiciary Subcommittee on Antitrust, Competition Policy and Consumer Rights with its testimony on February 11, 2004 ("NATOA Report").

As an introductory note by NATOA makes clear, the report was actually prepared a year ago and was presented to NATOA's Board of Directors in March 2003. The report purports to describe various actions by cable operators that supposedly have posed a "significant and growing threat to competition in the cable industry."

NATOA's introductory note specifically cautions that the examples cited in the report are based on media reports and allegations by local governments and "have not been further tested." NATOA therefore "encourage[s] readers to verify accuracy of any information which may have changed as a result of passage of time." Those warnings are well placed. Many of the allegations contained in the report are, in fact, stale, inaccurate or unverifiable.

Moreover, there are judicial and regulatory forums available to parties with legitimate complaints of anticompetitive conduct. There are no cases in which a judicial or regulatory body has confirmed the unfairness or unlawfulness of any of the conduct alleged in the report. In several cases, however, the allegations raised in the NATOA Report have subsequently been considered and rejected.

This is not surprising because the actions described in the report are generally not anticompetitive and harmful to consumers. Quite to the contrary, offering lower prices or special promotions to attract or win back customers from competitors is not something that generally

thwarts competition; it *is* competition, and consumers are the beneficiaries. Only in very limited circumstances are such tactics ever viewed as "predatory" and anticompetitive – and those circumstances do not exist in the examples of supposedly predatory conduct set forth in NATOA's report.

Some competitors of incumbent cable operators – who themselves often enter the marketplace with aggressively low prices and promotions – might have an easier time competing if the incumbents were barred from offering their own low prices and promotions. But protecting competitors *from* competition is the antithesis of promoting competition, and consumers are the ultimate victims of such protectionism.

PREDATORY PRICING

The NATOA Report is rife with allegations that cable multiple system operators (MSOs) have, in various instances, sought to compete with other wireline providers by offering prices that are below their nationwide average costs.¹ What this means, according to the report, is that (1) the MSOs must be losing money with such offers; (2) they must be subsidizing such below-cost offers with their profits from non-competitive markets; and (3) they must be offering such offers in order to drive their competitors out of business.

None of these conclusions are correct. As courts and antitrust experts have recognized, there is nothing inherently predatory in merely pricing below average costs. It is not necessarily a money-losing proposition for a company to sell goods or services at such prices. Only when a

For example, NATOA claims that the city of Scottsboro, Alabama "showed that Charter's monthly rate of \$24.95 to Scottsboro's subscribers was \$0.87 less than its *nationwide average monthly operating expense* of \$25.82 per subscriber." NATOA Report at 11 (emphasis added).

company sells goods or services at prices that are below average *variable* costs does a company lose money on each sale.²

It is not hard to understand why this is so. Companies have fixed costs and variable costs. The fixed costs – such as land, equipment, furniture, and factories – are incurred by the company regardless of how many purchases are made. The variable costs are the additional costs incurred with each additional purchase. If a company offers to sell a product or service for less than the variable costs associated with selling that product or service, it will lose money on each sale. It would be better off not selling the product at all.

But if a company offers to sell a product or service for more than the variable cost of selling that product or service, it will earn money on each sale. It may not make enough money to recoup all its fixed costs associated with the product or service – but those costs will be incurred whether or not it makes the additional sale. Therefore, the company will clearly be better off if a customer buys its product or service at a price that exceeds its average variable costs than if the customer does not buy its product at all and instead buys from a competitor.

In none of the examples reported by NATOA is there any suggestion or allegation that that a cable operator's prices are below its average *variable* costs.³ Nor is it likely that any prices or promotional offers would be below average variable costs, since so many of the costs of

Langenderfer, Inc. v. S.E. Johnson Co., 729 F.2d 1050, 1056 (6th Cir. 1984); Northeastern Tel. [Co. v. AT&T,

651 F.2d 76, 88 (2d Cir. 1981)].")

See P. Areeda & D. Turner, Predatory Pricing and Related Practices Under Section 2 of The Sherman Act, 88 Harv. L. Rev. 697, 718 (1975). See also, e.g., United States v. AMR Corp., 335 F.3d 1109, 1115 (10th Cir. 2003) ("For predatory pricing cases, . . . the ideal measure of cost would be marginal cost because '[a]s long as a firm's prices exceed its marginal cost, each additional sale decreases losses or increases profits.' [quoting Advo, Inc. v. Phila. Newspapers, Inc., 51 F.3d 1191, 1198 (3d Cir. 1995)] A commonly accepted proxy for marginal cost is Average Variable Cost ("AVC"), the average of those costs that vary with the level of output. See, e.g., Stearns Airport Equip. Co. v. FMC Corp., 170 F.3d 518, 532 (5th Cir. 1999); Advo, 51 F.3d at 1198; Arthur S.

³ As Charter has pointed out to the FCC, the supposed "costs" in the Scottsboro claim included a wide array of fixed costs that are not properly included under applicable antitrust (or FCC) analysis. *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Reply Comments of Charter Communications, Inc., CS Docket No. 01-129, (Sept. 5, 2001).

providing cable service are fixed costs. In particular, the cost of constructing and maintaining a cable plant that passes all the homes in a cable community is a very large fixed cost. And this cost is incurred whether or not any particular household purchases cable service.

To gain a new customer or to win back a former customer, a cable operator could lower its price far below its average *total* costs and still make money, as long as the price was higher than its *incremental* costs of serving that customer (such as the cost of installation, the additional programming costs, and the cost of billing the customer). It would make more sense to do so than to leave the customer unserved or served by a competitor.

This has nothing to do with subsidizing low prices in one area with monopoly profits from another area. And it has nothing to do with unfair efforts to put a competitor out of business. It would be a rational thing to do, even if the cable operator served no other areas and operated no other systems.

In any event, as courts and economists have recognized, even pricing that is below incremental costs would only be harmful to consumers if it enabled the supposed predator to eliminate competitors and then recapture its losses by raising prices to monopoly levels. Otherwise, the only effect on consumers would be a temporary drop in prices – which is hardly to their detriment.⁴ But even if a cable operator could, by temporarily reducing prices to moneylosing levels, drive out a wireline competitor, it could not acquire monopoly power unless it

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See, e.g., Brooke Group Ltd. V. Brown & Williamson Tobacco Corp., 509 U.S. 209, 224 (1993) ("The second prerequisite to holding a competitor liable under the antitrust laws for charging low prices is a demonstration that the competitor had a reasonable prospect, or, under Section 2 of the Sherman Act, a dangerous probability, of recouping its investment in below-cost prices. . . . 'For the investment to be rational, the [predator] must have a reasonable expectation of recovering, in the form of later monopoly profits, more than the losses suffered.' [Matsushita Elec. Industrial Co. v. Zenith Radio Corp., 475 U.S. 574, 588-589 (1986).] Recoupment is the ultimate object of an unlawful predatory pricing scheme. Without it, predatory pricing produces lower aggregate prices in the market, and consumer welfare is enhanced.") (Emphasis added).

were also able to eliminate its two substantial national DBS competitors.⁵ This is not remotely possible, and nothing in the NATOA Report suggests otherwise.

DISCRIMINATORY PRICING

Having failed to establish any instances of anticompetitive predatory pricing, the NATOA Report suggests that "targeted rate discrimination" – by which they mean "win-back" rates and promotions that are only available to customers who have switched or threatened to switch to competing providers – "can be anticompetitive and contrary to the public interest even if the perpetrator does not charge below-cost rates or have a reasonable probability of its recouping losses after driving its competitor out of the market."

The report does not explain how this can be the case. What the NATOA Report is complaining about is the sort of vigorous struggle for customers that goes on all the time in competitive markets. For example, when Southwest Airlines made Philadelphia a new hub and cut rates to as low as \$29, analysts concluded that it would be "suicidal" for US Airways not to

http://www.thestreet.com/ yahoo/tech/georgemannes/10142719.html .

Those DBS competitors are themselves competing fiercely for cable's customers. DBS offers free dishes, free installation, and discounted programming packages. See Chris Serres, Time Warner Offers 'Video on Demand' Service in Raleigh, N.C., Area, NEWS & OBSERVER, July 6, 2002. Dish retailers routinely offer \$199 rebate vouchers. See, e.g., http://www.commercemarketplace.com/home/rbelanger/onhold/Free_Promotions.html. In a previous marketing campaign specifically directed at Charter, EchoStar's DISH Network offered 115 channels for \$9 per month, and an additional \$100 off a DISH Network TV system starting at \$199. DISH Targets Charter in Promotion, SkyREPORT, Oct. 8, 2001 at http://www.skyreport.com/viewskyreport.cfm?ReleaseID=687#Story1. (The \$9 price was available to all new subscribers, while the \$100 off promotion was specifically limited to Charter subscribers). In announcing this campaign, EchoStar CEO Charlie Ergen said: "If Charter doesn't want to lose customers who switch to DISH Network, then their reaction should be better service and better pricing for their customers. We believe consumers, not Charter's lawyers, should decide who has lower rates. We challenge Charter to lower their rates." Id. Recently, both DirecTV and DISH have begun offering free second receivers and free digital video recorders (DVRs). Their SEC filings report huge subscriber acquisition costs – exceeding \$400 per customer – attributable to such giveaways and promotional rates. Echostar DBS Corp.-N/A, Form 10-Q, filed Nov. 13, 2003 for period ending Sept. 30, 2003, Part I, Item 2 at p. 29; Hughes Electronics Corporation, Form 10-Q, filed Nov. 7, 2003 for period ending Sept. 30, 2003, Part I, Item 2 at p. 37. See also, George Mannes, Hughes Electronics Posts Subscriber Gains, TheStreet.com, at

⁶ NATOA Report at 14.

cut prices.⁷ Major airlines create new discount airlines, such as United's "Ted" and Delta's "Song," that underprice their own "standard" fares in order to compete with existing low cost carriers, such as Southwest and America West.⁸ Sears, Home Depot, or Lowe's offer to "meet or beat" competitors' advertised prices. Many grocery stores will honor competitors' coupons. Mattress stores trumpet that they meet or beat competitors' prices.⁹

As discussed above, where pricing is not below incremental costs or there is no probability of recouping losses through monopoly pricing, consumers can only benefit from these sorts of competitive promotions, whether they are available throughout a community or are targeted at particular customers who have decided to switch. This, in fact, is precisely what the Public Service Commission of West Virginia recently found with respect to one of the alleged instances of targeted discrimination cited in the NATOA Report.¹⁰

After an extensive two-year proceeding, the West Virginia PSC concluded that Charter Communications' offering of reduced or promotional rates to defined categories of customers (including, and sometimes limited to, an overbuilder's subscribers) in Parkersburg was a reasonable competitive response that benefited consumers. The PSC found that the Parkersburg market was "characterized by . . . intense rivalry and competition" among an incumbent cable operator, a wireline overbuilder, and two national satellite services. And it determined that, far from having an anticompetitive effect, "the promotional offers in the Parkersburg/Wood County

Ben Mutzabaugh, *Philadelphia Fare Wars Intensify*, USATODAY.com *at* http://www.usatoday.com/travel/deals/fare/compare.htm (last accessed February 20, 2004). *See also*, Melanie Trottman, *Southwest Air Rivals US Air in Philadelphia*, WALL ST. J., Dec. 12, 2003 at A8.

⁸ Paula Scuchman and Susan Carey, *Trouble in Low-Fare Land*, WALL St. J., Feb. 13, 2004 at W1.

⁹ Matthew Kauffman, *No Rest for the Weary*, THE HARTFORD COURANT, Jan. 15, 2004 at E1.

Community Antenna Serv. v. Charter Communications, VI, LLC, Case No.01-0646-CTV-C, slip opinion, (WV Pub. Serv. Comm'n Feb, 10, 2004); petition for recon. filed, Feb. 17, 2004.

¹¹ *Id. at* 13.

area have created an environment of *more* competition and has resulted in *lower prices to* consumers."¹²

As the PSC pointed out, both the incumbent cable operator and the overbuilder offered similar targeted promotions – and, as a result, the number of customers switching from the incumbent to the overbuilder was almost equal to the number moving from the overbuilder to the incumbent. In these circumstances, the Commission concluded that it was not its "role to dictate market strategy in these competitive situations, *particularly when the effect is benefiting the public.*" ¹³

In the context of common carrier regulation, the Federal Communications Commission also held that Verizon's marketing approach of offering special concessions to potential wireless phone customers in order to keep them from choosing another provider should not be deemed unreasonably discriminatory. The United States Court of Appeals affirmed the FCC's determination, noting that such an approach was good for consumers:

In considering whether Verizon justified its sales concession practices as reasonable, the Commission was "entitled to value the free market, the benefits of which are well-established." *MCI WorldCom v. FCC*, 209 F.3d 760, 766 (D.C.Cir.2000). Haggling is a normal feature of many competitive markets. It allows consumers to get the full benefit of competition by playing competitors against each other. Here Verizon has adopted the practice as a competitive marketing strategy. Consumers, including Orloff, can only benefit.¹⁴

The FCC also recently rejected the complaint of Wide Open West ("WOW"), cited in the NATOA Report, that it was anticompetitive and unfair – and at odds with the customer service provisions of the 1992 Cable Act – for Comcast not to "disclose in writing to all of its customers

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¹² *Id.* (emphasis added).

Id. at 13-14 (emphasis added). See also Implementation of Cable Act Reform Provisions of the Telecommunications Act of 1996, Report and Order, 14 FCC Rcd 5296 ¶ 107 (1999)("To paraphrase the Supreme Court, it would be ironic indeed if the standards for predatory pricing liability were so low that predatory pricing complaints themselves became a tool for keeping prices high.").

each and every offer made to any customer for any reason for any period of time."¹⁵ The FCC correctly recognized that WOW, an overbuilder competing with Comcast in the Detroit, Michigan area, was, in effect, "seek[ing] to preclude all win-backs and other promotional activities."¹⁶ It rejected WOW's contention that such a result was consistent with the statutory objectives of the Act.

NON-UNIFORM RATES

The NATOA Report also notes that when Congress enacted the Cable Consumer Protection and Competition Act of 1992, it included a requirement that cable operators charge uniform rates throughout a cable franchise area. ¹⁷ In 1992, DBS had not yet been launched and cable was perceived by many as having no significant competition from other multichannel video programming distributors. The uniform rate requirement had the effect of incubating the development of such competition from wireline overbuilders by protecting them from targeted price competition.

But the uniform rate requirement Act was enacted as part of the rate regulation provisions of the 1992 Act, and therefore, as the D.C. Circuit confirmed, applied only to systems that were subject to rate regulation – i.e., systems that were not subject to effective competition. This made good economic sense. The protectionism of the uniform rate requirement would clearly be

¹⁴ Orloff v. FCC, 352 F.3d 415, 421 (D.C. Cir. 1993).

In re Complaint Against Comcast Corporation, Memorandum Opinion and Order, EB-02-MD-033, FCC 03-333, released Jan. 8, 2004, ¶ 9.

¹⁶ *Id*.

¹⁷ See 47 U.S.C. § 543(d).

See Time Warner Entertainment Co., L.P. v. FCC, 56 F.3d 151, 191 (D.C. Cir. 1995). As the Court noted, requiring systems subject to effective competition to charge uniform rates would "undermine[] a hallmark purpose of the 1992 Act: to allow market forces to determine the rates charged by cable systems that are subject

unnecessary and detrimental to consumers in those markets where cable operators faced effective competition and could not, therefore, have any chance of recouping targeted discounts with monopoly pricing.

In the Telecommunications Act of 1996, Congress confirmed the D.C. Circuit's interpretation of the statute and explicitly created an exception to the uniform rate requirement where a cable operator is subject to effective competition – an exception which is wholly consistent with the established standards for predatory pricing. The NATOA Report concedes that this exception "may sound reasonable in theory." Its principal complaint is only that the FCC's application of the statutory "effective competition" standard has been misapplied. In its view, the FCC has found cable operators to be subject to effective competition where no such competition really exists.

Today, when virtually all television households have a choice of at least three providers of multichannel service, including a cable operator and two national DBS services, this stale complaint rings hollow. As the General Accounting Office recently confirmed, those DBS services now provide "formidable" competition to cable operators virtually everywhere.²⁰ In these circumstances, there is no reason to protect overbuilders from price competition – and to deny consumers the price breaks associated with targeted competitive discounts and promotions. Yet the NATOA Report suggests that steps be taken to ensure such protectionism in perpetuity.

EXCLUSIVE ACCESS TO MULTIPLE DWELLING UNITS

to 'effective competition' as defined by Congress. In other words, where 'effective competition' exists, the consumer is left to the wiles of the marketplace." *Id.*

¹⁹ NATOA Report at 15.

The NATOA Report also suggests that exclusive contracts to serve multiple dwelling units (MDUs) are thwarting competition from overbuilders. The report concedes, however, that the FCC recently examined this question in an extensive rulemaking proceeding and was unable to conclude that the adverse effects of such exclusivity on competition outweighed the procompetitive effects.

The Commission undertook to examine the question of exclusive contracts because some overbuilders had been making precisely the same sort of general and unsubstantiated allegations that are set forth in the NATOA Report. But when offered the opportunity to document their case, the overbuilders came up empty. The FCC found that

[t]he record does not indicate the extent to which exclusive contracts have been utilized, and, more importantly, does not demonstrate that such contracts have thwarted alternative providers' entrance into the MDU market, so as to warrant imposition of limits on such contracts.²¹

What does the NATOA Report offer to counter the results of the FCC's comprehensive inquiry? Nothing but one more unsubstantiated anecdote involving exclusive contracts between Time Warner and MDU owners in Charlotte and Raleigh, North Carolina, which the report suggests caused the demise of overbuilder Carolina Broadband. But Carolina Broadband's own representatives have elsewhere made clear that it was "a lack of investments in a slowing economy" and "the current drought in bank financing for emerging telecommunications" and not exclusive contracts to serve MDUs – that were the cause of their problems.

See General Accounting Office, Report to the Subcommittee on Antitrust, Competition Policy, and Consumer Rights, Committee on the Judiciary, United States Senate, "Wire-Based Competition Benefited Consumers in Selected Markets," Feb. 4, 2004, p. 26 ("GAO Report").

First Order on Reconsideration and Second Report and Order, CS Docket No. 95-184, MM Docket No. 92-260, 18 FCC Rcd 1342, 1369 (2003).

²² "Cable Company Delays Network," *Charlotte Observer*, June 26, 2001, p. 1A.

²³ "We're Here To Stay; Carolina Broadband Is Taking a Time Out for Financing Drought To Pass, But Our Services Will Be Worth Waiting For," *Charlotte Observer*, July 3, 2001, p. 12A.

Thus, according to the minutes from a meeting on June 25, 2001, Carolina Broadband's CEO told the Charlotte City Council that:

[t]he most daunting roadblock by far has been the global economy and its effect on businesses like theirs in the capital market. Over the long term, they can compete with the incumbent provider and work through difficulties in getting on poles and into apartment buildings, and they can handle most any other challenges that may come their way. What they can't control is the economy. . . . Despite their best efforts over the past six months, the deteriorating economic climate, including the virtual shutdown of the capital markets to emerging carriers such as Carolina Broadband, has made securing the remainder of the debt portion exceedingly difficult at this time. 24

This, of course, is consistent with what the General Accounting Office found in its recent study of overbuild competition. GAO reported that all the overbuilders that it studied "have had difficulties securing continued access to adequate financial resources that are needed to rapidly construct their networks and market their services. As a result, the BSPs we interviewed are currently experiencing varying states of financial problems due to a lack of capital." These problems have nothing to do with exclusive MDU contracts – or access to programming, or predatory or discriminatory rates, or any of the other supposedly anticompetitive practices alleged in the NATOA Report. According to GAO, "BSPs told us that, to a large extent, these financial problems are the result of the economic problems that have affected the entire telecommunications sector."

Minutes of lunch briefing of City Council of the City of Charlotte, North Carolina, June 25, 2001 (Minutes Book 116, p. 613) (emphasis added).

²⁵ GAO Report, *supra*, at 5-6.

²⁶ *Id.* at 27.

ACCESS TO PROGRAMMING

The NATOA Report includes a lengthy complaint that the program access provisions of the 1992 Cable Act, which limit the right of vertically integrated, satellite-delivered program networks and cable operators to enter into exclusive contracts, includes a "loophole" exempting terrestrially delivered program networks. As NCTA has previously pointed out,²⁷ it is wrong to characterize the terrestrial exemption as a "loophole." To the contrary, Congress struck a deliberate balance in 1992. It sought to ensure that cable's fledgling competitors would have sufficient access to popular programming, while preserving the procompetitive benefits of exclusivity in order to foster new program networks – especially local and regional programming networks.

The current law preserves incentives to engage in the significant financial risk-taking necessary to launch and promote local and regional program services. At the same time, overbuilders can choose from among hundreds of channels of available programming.

As discussed above, there are many reasons why overbuilders have had difficulty competing successfully in a vibrantly competitive video marketplace that now includes not only the incumbent cable operator but also two formidable national DBS providers. But nobody has presented any credible evidence that limited exclusivity for a few channels among the hundreds otherwise available has had the effect of thwarting an overbuilder's ability to compete. The NATOA Report adds no new evidence and sheds no new light on the matter.

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See Letter of Steven K. Berry, NCTA Senior Vice President, Government Relations to Pete Levitas, Majority Staff Director and Chief Counsel, Senate Judiciary Subcommittee on Antitrust, Competition Policy and Consumer Rights, March 4, 2004.

CONCLUSION

The NATOA Report is filled with allegations of conduct by cable operators that has supposedly thwarted competition in the video marketplace. But the report fails to show how the conduct that it alleges harms consumers. To the contrary, the activities that NATOA characterizes as anticompetitive – in particular, discounted prices, promotional win-back offers, and exclusive contracts – are the hallmarks of a vibrantly competitive marketplace that benefits consumers. Barring such practices might protect certain *competitors* – but it would only harm *competition* and *consumers*.